

DOCUMENT RESUME

ED 072 591

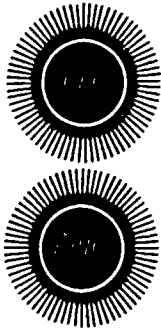
EC 051 102

TITLE Physical Facilities; A Selective Bibliography.
Exceptional Child Bibliography Series No. 634.
INSTITUTION Council for Exceptional Children, Arlington, Va.
Information Center on Exceptional Children.
SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE),
Washington, D.C.
PUB DATE Aug 72
NOTE 32p.
AVAILABLE FROM Council for Exceptional Children, 1411 South
Jefferson Davis Highway, Suite 900, Arlington,
Virginia 22202

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Abstracts; *Bibliographies; Educational Facilities;
*Exceptional Child Education; *Facilities;
*Handicapped Children; Physical Environment

ABSTRACT

The selected bibliography of physical facilities for handicapped children contains an explanation of indexing and approximately 100 abstracts to be drawn from the computer file of abstracts representing the Council for Exceptional Children Information Center's complete holdings as of August, 1972. Abstracts are said to be chosen using the criteria of availability of document to user, currency, information value, author's reputation, and classical content. Preliminary information explains how to read the abstract (a sample abstract is included which identifies the different parts of the abstract), how to use the author and subject indexes, how to purchase documents through the Educational Resources Information Center Document Reproduction Service (four order blanks are provided), an order blank for Exceptional Child Education Abstracts in which the abstracts are originally published, a list of indexing terms searched to compile the bibliography, and a list of journals from which articles are abstracted for the bibliography. Publication date of documents ranges from 1952 to 1972. (DB)



PHYSICAL FACILITIES

A Selective Bibliography

August, 1972

CEC Information Center on Exceptional Children
An ERIC Clearinghouse
The Council for Exceptional Children
Jefferson Plaza, Suite 900
1411 S. Jefferson Davis Highway
Arlington, Virginia 22202

Exceptional Child Bibliography Series No. 634

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With a grant from the US Office of Education, the CEC Information Center was established at The Council for Exceptional Children to serve as a comprehensive source of information on research, instructional materials, programs, administration, teacher education, methods, curriculum, etc. for the field of special education. The Center functions as the Clearinghouse on Exceptional Children in the Educational Resources Information Centers (ERIC) program and also as a member center in the Special Education IMC/RMC Network. In addition, the CEC Center's program includes a commitment to a concentrated effort towards the development of products which will interpret research results into educational methods and practices.

How to Use This Bibliography

The *Exceptional Child Bibliography Series* was initiated by the CEC Information Center to answer the need for rapid responses to specific requests for information. The volume of information requests received by the Center is analyzed and used as a guide in preparing special topic bibliographies in the field of exceptional child education. Abstracts contained in the bibliographies are drawn from the computer file of abstracts which represents the CEC Information Center's complete holdings as of the date indicated on each bibliography.

Selective editing by Information Specialists is performed on each bibliography. From the total number of abstracts drawn from the file on a particular topic, selection is made of only those judged to best meet the following criteria: availability of the document to the user, currency, information value, author's reputation, and classical content. The number of abstracts selected to appear in a bibliography may vary from one to 100, depending on the amount of suitable information available. Updating of bibliographies as new material becomes available is accomplished when the volume of new material reaches 25 percent of presently available material on a given topic.

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Each abstract contains three sections—bibliographic data, descriptors, and a summary of the document. The bibliographic section provides the document's identifying number (ED and/or EC), publication date, author, title, source, and availability. The descriptors indicate the subjects with which a document deals. The summary provides a comprehensive overview of the document's contents and in some cases document availability is announced here.

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Some bibliographies in *Exceptional Children Bibliography Series* contain author and/or subject indexes. In these bibliographies, readers seeking work on a specific aspect of the general topic may consult the subject index to be referred to specific abstract numbers. Abstracts dealing with several topics may be identified by finding the same abstract number under two or more subjects in the subject index.

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Abstracts appearing in the bibliographies have also been published in *Exceptional Child Education Abstracts*, the quarterly abstract publication of the Council for Exceptional Children. Approximately 750 abstracts covering the broad range of exceptionality appear in each issue. (Subscription order form below.)

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Sample Abstract Entry

Clearinghouse accession number	ABSTRACT 788	Abstract number used in Indexes
Publication date	EC 01 0769	ERIC accession number. Use this number when ordering microfiche and hard copy
Author(s)	Publ. Date Jun 68 Hensley, Gene Ed.; Buck, Joseph P. Ed.	Number of pages. Use this figure to compute cost of hard copy.
Title	Cooperative Agreements between Special Education and Rehabilitation Services in the West. Selected Papers from a Conference on Cooperative Agreements (Las Vegas, Nevada, February, 1968).	Institution(s)
EDRS mf, hc indicates document is available in microfiche and hard copy.*	Western Interstate Commission for Higher Education, Boulder, Colorado; United Cerebral Palsy Research and Education Foundation, Inc., New York; Rehabilitation Services Administration (DHEW), Washington, D. C.	Contract or grant number
	EDRS mf, hc VRA-546T66	Descriptors—subject terms which characterize content
	Descriptors: exceptional child education; cooperative programs; vocational rehabilitation; vocational education; administration; mentally handicapped; state agencies; cooperative agreements; educational coordination; cooperative programs; state federal aid; administrative problems; communication; state laws; occupational aid; work study programs; handicapped; cost effectiveness	
Summary	Five papers discuss cooperative work study agreements between schools and vocational rehabilitation services in the western states. Areas discussed include the advantages of cooperative agreements, the forms and characteristics of third party agreements, basic elements of the programs, and an outline form to use when applying for matching funds. The relationship of special education, rehabilitation and cooperative plans, programs and agreements and characteristics of past and present work study programs for the mentally retarded. Also reviewed are research demonstrating the economic feasibility of vocational training for the educable mentally retarded in the public schools and communication programs. A work study program. The conference summary considers the papers, work, current and future of cooperative agreements. (RM)	Abstractor's initials

*NOTE: EDRS mf indicates microfiche reproduction only.

INDEXING TERMS SEARCHED

Indexing terms used to retrieve information on *Physical Facilities* from the Center's computer file of abstracts are listed alphabetically below:

<i>Acoustical Environment</i>	<i>Furniture Arrangement</i>
<i>Acoustics</i>	<i>Furniture Design</i>
<i>Architects</i>	<i>Glare</i>
<i>Architectural Programming</i>	<i>Heating</i>
<i>Architecture</i>	<i>Illumination Levels</i>
<i>Building Design</i>	<i>Interior Design</i>
<i>Building Equipment</i>	<i>Interior Space</i>
<i>Building Materials</i>	<i>Light</i>
<i>Building Plans</i>	<i>Lighting</i>
<i>Ceilings</i>	<i>Mobile Classroom</i>
<i>Classroom Arrangement</i>	<i>Movable Partitions</i>
<i>Classroom Design</i>	<i>Offices (Facilities)</i>
<i>Classroom Furniture</i>	<i>Physical Environment</i>
<i>Classrooms</i>	<i>Physical Facilities</i>
<i>Climate Control</i>	<i>Recreational Facilities</i>
<i>Climatic Factors</i>	<i>Residential Centers</i>
<i>College Buildings</i>	<i>Safety</i>
<i>Color Planning</i>	<i>Sanitary Facilities</i>
<i>Construction Needs</i>	<i>School Buildings</i>
<i>Construction (Process)</i>	<i>School Construction</i>
<i>Design Needs</i>	<i>School Design</i>
<i>Educational Equipment</i>	<i>School Planning</i>
<i>Educational Facilities</i>	<i>Schools</i>
<i>Educational Specifications</i>	<i>Self Contained Classrooms</i>
<i>Environmental Influences</i>	<i>Sheltered Workshops</i>
<i>Equipment</i>	<i>Site Development</i>
<i>Facilities</i>	<i>Site Selection</i>
<i>Facility Case Studies</i>	<i>Space Dividers</i>
<i>Facility Guidelines</i>	<i>Space Utilization</i>
<i>Facility Requirements</i>	<i>Spatial Relationship</i>
<i>Fire Protection</i>	<i>Structural Building Systems</i>
<i>Flexible Facilities</i>	<i>Studio Floor Plans</i>
<i>Flooring</i>	<i>Windowless Rooms</i>
<i>Furniture</i>	

JOURNALS USED

Abstracts of articles from the following periodicals appear in this bibliography:

<i>American Annals of the Deaf</i>	<i>Mental Retardation</i>
<i>American Journal of Occupational Therapy</i>	<i>Nation's Schools</i>
<i>Australian Journal of Mentally Retarded</i>	<i>New Outlook for the Blind</i>
<i>British Journal of Mental Subnormality</i>	<i>Optometric Weekly</i>
<i>Child Welfare</i>	<i>Physical Therapy</i>
<i>Conservationist</i>	<i>Potomac Valley Architect</i>
<i>Education and Training of the Mentally Retarded</i>	<i>Progressive Architecture</i>
<i>Education of the Visually Handicapped</i>	<i>Review of Educational Research</i>
<i>Educational Media</i>	<i>Special Education</i>
<i>Exceptional Children</i>	<i>TEACHING Exceptional Children</i>
<i>Journal of Rehabilitation</i>	

The abstracts in this bibliography were selected from *Exceptional Child Education Abstracts*, Volumes I-IV, No. 2.

ABSTRACTS

ABSTRACT 10125

EC 01 0125 ED 016 351
 Publ. Date Mar 67 11p.
 Hall, Robert E.; Lehman, Eileen F.
Some Colleges and Universities with Special Facilities to Accommodate Handicapped Students, a Directory.
 Office Of Education, Washington, D. C
 EDRS mf, hc

Descriptors: exceptional child education; physically handicapped; physical facilities; orthopedically handicapped; colleges; universities; directories; special services; physical education; vocational rehabilitation; special counselors; counseling services; federal programs; handicapped; college buildings

The directory lists 190 United States colleges and universities enrolling more than 1000 students in 40 states and the District of Columbia which provide at least two of six conveniences for handicapped students--(1) on-campus housing ramps, (2) classroom ramps, (3) library ramps, (4) beveled curbs, (5) reserved parking, and (6) modified toilet facilities. The directory also indicates the presence of related services--special counselors, regular vocational rehabilitation, service visits, and adapted physical education. Further descriptive information about each institution includes location, control (public or private), length of program offered, type of student body (coed, male, female), and whether the institution participates in the Public Law 85-926 (as amended) Traineeship-Fellowship Programs. The directory notes other federal financial aid programs briefly--college work-study programs, National Defense students, loans, Educational Opportunity grants, and guaranteed loans. Also cited are some state and private sources of scholarships and loans (DF)

ABSTRACT 10169

EC 01 0169 ED 018 905
 Publ. Date 67
 Bayes, Kenneth
The Therapeutic Effect of Environment on Emotionally Disturbed and Mentally Subnormal Children.
 Society For Emotionally Disturbed Child., Montreal, Quebec
 EDRS not available

Descriptors: exceptional child research; mentally handicapped; emotionally disturbed; environmental influences; behavior; children; adults; therapeutic environment; building design; architecture; perception; visual perception; research needs; research projects; vocabulary; mental illness; surveys; opinions; planning; administration; visual environment; behavior change

Current research and thought on the effects of architectural form and color in the treatment of emotionally disturbed and retarded children are surveyed in this publication. To a lesser extent, it covers the relationship of therapy to behavior, normal children to handicapped children, normal adults to mental patients, and children to adults. Architects, psychiatrists, psychologists, educators, anthropologists, and sociologists in Great Britain, Europe, the United States, and elsewhere were consulted, and their findings, opinions, practices, and principles are presented in chapters on terminology, background studies, planning and form, color, and other sensory perceptions. The need for research is clarified, methods and problems are discussed, and proposals for future research are provided. Appendixes specify the terms of the Kaufmann Award, list persons and institutions consulted and contacted, and cite 97 references. This document is available from the Society for Emotionally Disturbed Children, 1010 St. Catherine West, Room 623, Montreal, Quebec, Canada, for \$2.00. (JZ)

ABSTRACT 10948

EC 01 0948 ED 026 792
 Publ. Date 68 261p.
Designing Instructional Facilities for Teaching the Deaf: The Learning Module; Symposium on Research and Utilization of Educational Media for Teaching the Deaf (4th, Lincoln, Nebraska, February 5-7, 1968).
 Nebraska University, Lincoln, Department Of Educational Administration; Midwest Regional Media Center For The Deaf, Lincoln, Nebraska
 Office Of Education (DHEW), Washington, D. C., Captioned Films For The Deaf Branch
 EDRS mf, hc
 OEC-3-7-000199-0199(019)

Descriptors: exceptional child education; aurally handicapped; facilities; audiovisual instruction; deaf; instructional technology; acoustics; educational facilities; design needs; architectural programming; facility requirements; lighting; school planning; classroom furniture; multimedia; instruction; classroom design; educational specifications; environmental design

Eleven conference papers treat designing learning modules, or complete instructional facilities, for the deaf. The following aspects are considered: the changing classroom, a multimedia approach to teaching American history, a project design for a special school, and educational implications of architecture

for the deaf. Further topics are acoustical design of classrooms for the deaf, the use of amplification in educating deaf children, furnishings in the workshop classroom, and lighting in the learning module. Creating environments for learning, providing through architecture for social needs, and planning the deaf child's complete formal education are also discussed; a report from Captioned Films for the Deaf, conference and discussion summaries, foreword, and introduction are provided. Appended are the program and roster of participants. (JD)

ABSTRACT 11108

EC 01 1108 ED N.A.
 Publ. Date May 66 124p.
 Salmon, F. Cuthbert; Salmon, Christine F.
Sheltered Workshops; An Architectural Guide.
 Oklahoma State University, Stillwater, School Of Architecture
 Vocational Rehabilitation Administration (DHEW), Washington, D. C.
 EDRS not available

Descriptors: exceptional child services; sheltered workshops; facilities; facility guidelines; handicapped; building design; building materials; work environment; design needs; architecture; physically handicapped; facility requirements; vocational rehabilitation; physical facilities; community services; site selection; program planning; program design; special services; architectural programming

Based on the observation of 24 sheltered workshops of diverse types and sizes, the guide presents information on architectural programming and planning. The role of the sheltered workshop, community needs, site considerations, and the program are described. In addition, planning principles, work principles, and the physical plant are discussed and graphically illustrated. An appendix provides the following: a checklist for planning and construction; an analysis of materials and methods of construction; a glossary of commonly used terms; American Standard Specifications for making buildings and facilities accessible to and usable by the physically handicapped; and a list of workshops studied. (JD)

ABSTRACT 11109

EC 01 1109 ED N.A.
 Publ. Date Oct 55 5p.
 Foote, Franklin M.
Classrooms for Partially Seeing Children.
 National Society For The Prevention Of

Blindness, New York, New York
EDRS not available
Exceptional Children; V22 N1 P318-20,
41-2 Oct 1955

Descriptors: exceptional child education; visually handicapped; partially sighted; educational facilities; classrooms; equipment; classroom furniture; illumination levels; classroom design; classroom arrangement

Aspects of special classrooms or resource rooms for partially sighted children are described, including type and placement of furniture, special equipment, storage, illumination of the room, and dimensions of the sight conservation room. (JD)

ABSTRACT 11114

EC 01 1114 ED N.A.
Publ. Date Apr 52 5p.
Birren, Faber

The Emotional Significance of Color Preference.

American Occupational Therapy Association, New York, New York
EDRS not available
American Journal Of Occupational Therapy; V6 N2 P1-5 Mar-Apr 1952

Descriptors: color planning; building design; environmental influences; physical environment; psychotherapy; individual characteristics; emotionally disturbed; therapeutic environment

Relationships between color preference and personality are presented; the range of the spectrum from red (warm, exciting), to blue (cold, subduing) is discussed. Attitudes toward color are related to moods; love of color is connected with a responsive personality and interest in the world while preference for form is connected to inner directedness. The effect of color is described for the mentally ill, psychotics, epileptics, neurotics, and hysterical persons. Specific colors of red, yellow, green, blue-green, blue, brown, orange, purple, maroon, and pink are linked to personality traits. The psychotherapeutic value of color and its diagnostic and therapeutic use in buildings are considered. (RP)

ABSTRACT 11115

EC 01 1115 ED N.A.
Publ. Date Sep 67 5p.
Birren, Faber

Color It Color.

EDRS not available
Reinhold Publishing Corporation, 430 Park Avenue, New York, New York 10022,
Progressive Architecture; V48 N9 P129-33 Sept 1967

Descriptors: color planning; design needs; lighting; psychological design needs; visual stimuli; illumination levels; task performance; physical environment; physiology

A discussion of the world of color considers the sources of color, light, color production in the brain, and the effects of different kinds of light and color on man, animals, plants, insects, fish, and birds, especially in growth and

sexual activity. Brilliant light and warm colors are said to produce increased muscular tension, attraction to the stimulus, automatic arousal, and increased cortical activity. The effects of dim light and cool color are presented: relaxation of muscles, withdrawal from stimulation, and a drop in respiration rate, heart action, and blood pressure. The visual aspects of color described are the amount of light necessary for sight, glare, and abuse of the eyes; color laws are suggested for designers. Included in the psychological aspect of colors are the influence of specific colors, reactions of the mentally ill, and practical applications of research. Conclusions stated are the use of light and warm colors to produce outer directed behavior and the use of softer light and cooler hues to reduce distraction and direct action inward. (RP)

ABSTRACT 11117

EC 01 1117 ED N.A.
Publ. Date 65 11p.

The Effect of Windowless Classrooms on Elementary School Children; An Environmental Case Study.

Michigan University, Ann Arbor. Architectural Research Laboratory,
Educational Facilities Laboratories, Inc., New York, New York
EDRS not available

The University Of Michigan, Department Of Architecture, Architectural Research Laboratory, Ann Arbor, Michigan 48104.

Descriptors: exceptional child research; windowless rooms; attitudes; building design; classroom design; teacher attitudes; parent attitudes; student attitudes; photographs; educational facilities; school architecture; elementary schools

To investigate environmental effects on teachers and children three case studies were undertaken; one during a school year when classrooms had windows, one during a year with no windows, and one during a 1/2 year with windows restored. Teachers interviewed pupils individually and conducted a questionnaire survey to gather student opinions on their scholastic performance. After one year in windowless classrooms, all teachers except one reported that she liked her room very much. The one exception did not object to lack of windows but to her room location. Reasons for liking the rooms were less distraction, more even heat, more flexibility in seating and furniture arrangement, and increased wall space. Results of parent questionnaires indicated that the minority who opposed the study at the beginning continued to oppose it while those who were favorable felt the same way at the end. Children appeared to be indifferent to lack of windows and did not often comment on this to teachers, but the majority said they had wished for windows when asked. Comparisons of achievement for pupils in windowless rooms with pupils who had windows showed no significant differences in

learning; what effect there was seemed to depend on whether or not a group was task oriented. Conclusions were that it is not likely that children will be adversely affected by the elimination of windows. Floor plans, section drawings, pictures of the school, results of questionnaires, teacher ratings, and absentee rates are included. (RP)

ABSTRACT 11120

EC 01 1120 ED N.A.
Publ. Date May 66 187p.

Bailey, Roger And Others

Mental Health Facilities for Inpatient Adolescents.

Architectural Psychology Interdepartment Program, Salt Lake City, Utah
National Institute Of Mental Health, Bethesda, Maryland;
Utah University, Salt Lake City, Department Of Architecture;
Utah University, Salt Lake City, Department Of Psychology
EDRS not available
PH-43-65-1068

Descriptors: exceptional child research; emotionally disturbed adolescents; institutional facilities; psychiatric hospitals; architectural programming; building design; educational facilities; special services; administration; personnel; site selection; admission criteria; educational programs; group living; occupational therapy; recreational programs; psychiatric services; design needs; regional programs; community services

Interviews with consultants and visits to institutions are analyzed to determine present practices and trends in treating adolescent mental patients. Information gathered concerns philosophy of treatment and program, the adolescent, and facilities. Three schemes for living areas and architectural character are considered, and suggestions are made and specifications offered for site, admitting and screening, administration and staff living areas, therapy areas, educational program and facilities, and ancillary and utility areas. Findings indicate that plans for facilities are dependent upon the staff-patient ratio and upon regional climatic and social problems, that adolescents require more space than adults; that facilities should be located convenient to the community they serve; and that they should be regarded as a residential school which also provides vocational education. Additional findings concern the ineffective nature of short term help, the need for a continuum of services and facilities within the community, and the use of additional and varied services to lessen the load placed on inpatient facilities. (JD)

ABSTRACT 11125

EC 01 1125 ED N.A.
Publ. Date Jul 67 27p.

Bair, Howard V.; Leland, Henry

The Utilization and Design of Physical Facilities for the Rehabilitation of Mentally Retarded. Final Project Report.

Parsons State Hospital And Training Center, Kansas
Vocational Rehabilitation Administration (DHEW), Washington, D. C.
EDRS mf,hc
VRA-RD-1319-G-64

Descriptors: exceptional child research; mentally handicapped; institutional facilities; architectural programing; audiovisual aids; closed circuit television; flexible facilities; movable partitions; space utilization; classrooms; controlled environment; rehabilitation programs; building design; professional education

To investigate the appropriate design and utilization of physical facilities being constructed as a rehabilitation center, a variety of centers was examined. Conclusions were that flexibility in construction of the physical plant, including nonpermanent walls and fixtures was necessary; program planning should be included in architectural discussions to avoid later modifications; facilities should be designed with the concept of a teaching hospital in mind; equipment and materials for program development, especially technical aids and audiovisual facilities, should be acquired on an experimental basis; design must be based on changing community needs; and the service, research, professional training, and demonstration areas should overlap and flow into and out of each other. Consideration was given to the role of the staff and the kinds of areas they would need, classrooms for training programs, a television studio and control room, advanced planning for installation of audiovisual equipment, varied use of the same space, and facilities for behavior modification training. (Author/RP)

ABSTRACT 11126

EC 01 1126 ED 028 587-29p.
Publ. Date Jan 67
Architectural Considerations for Classrooms for Exceptional Children.
Texas Education Agency, Austin, Division Of Special Education
EDRS mf,hc

Descriptors: exceptional child education; handicapped children; educational facilities; classroom design; visually handicapped; physically handicapped; blind; partially sighted; learning disabilities; minimally brain injured; aurally handicapped; mentally handicapped; deaf; educable mentally handicapped; trainable mentally handicapped; speech handicapped; emotionally disturbed; facility requirements; educational specifications

Definitions are provided of the following exceptionalities: blind, partially sighted, physically handicapped, minimally brain injured, deaf, educable mentally retarded (primary, junior, and senior high levels), trainable mentally retarded, speech handicapped, and emotionally disturbed. Architectural guidelines specify classroom location, size, acoustical treatment, heat and light, ventilation, electrical outlets, bulletin boards and chalkboards, floors, and drinking foun-

tain, sink, and counter space. Additional specifications are given for certain exceptionalities. (JD)

ABSTRACT 11128

EC 01 1128 ED N.A.
Publ. Date 63 129p.
Fitzroy, Daniel; Reid, John Lyon
Acoustical Environment of School Buildings.
Educational Facilities Laboratories, Inc., New York, New York
EDRS not available
TR-1
Educational Facilities Laboratories, Inc., 477 Madison Avenue, New York, New York 10022.

Descriptors: acoustics; acoustical environment; building design; interior space; flexible facilities; administrator attitudes; student attitudes, teacher attitudes; classroom design; flooring; school buildings; movable partitions; corridors; spatial relationship; photographs; elementary schools; secondary schools; colleges; design needs

To study the trend in interior design toward more openness and the resulting acoustical problems, students, teachers, and administrators were interviewed to determine the minimum acoustical separation necessary to allow a group to work effectively. Field tests were conducted in the rooms of 35 elementary and secondary schools and in two colleges to measure noise reduction between rooms. None met the criteria of 40 decibels of noise reduction. Floor plans of the rooms were drawn up with noise reduction levels for the door open or closed and for the class in session or silent. Conclusions were that classrooms are less satisfactory when a high articulation index and a reverberant environment are present, even when noise reduction is high; when a room was near optimum reverberation environment, lower noise reduction was acceptable. Recommendations are made for flexible room arrangements, use of absorptive floor coverings, better insulation around music and gym rooms, careful attention to sound level when using audio equipment, and higher sound interception in the lower grades. (RP)

ABSTRACT 11135

EC 01 1135 ED N.A.
Publ. Date Nov 66 22p
Spivack, Mayer
Some Psychological Implications of Mental Health Center Architecture.
Harvard Medical School, Cambridge, Massachusetts, Laboratory Of Community Psychiatry;
Medical Foundation, Inc., Boston, Massachusetts
Permanent Charities, Inc., Boston, Massachusetts;
National Institute Of Mental Health, Bethesda, Maryland
EDRS not available
PH43-66-1150
Paper Presented At The Annual Meeting Of The New England Psychological Association (6th, Boston, Massachusetts, November 11-12, 1966).

Descriptors: exceptional child services; mental health clinics; environmental influences; space utilization; behavior patterns; visual perception; lighting; building design; corridors; acoustics; design needs

The lack of alternative design models for comprehensive community mental health centers and the need for planners to produce information are discussed. The following conceptual positions are thus offered to define research problems: particular behavior settings result in standing behavior patterns; physical environment exists as a cultural and social artifact displaying messages about its users; social and personal spaces affect communication; a need exists for possession of territory, a piece of the physical environment; and physical environment exists as a sensory stimulus field. Implications of the above positions considered include the undifferentiated behavior settings of flexible or dayroom space and of corridors to the use of indestructible finishing materials, and the territorial behavior of assorted animals. Photographs are explained illustrating the problems discussed. (JD)

ABSTRACT 11139

EC 01 1139 ED N.A.
Publ. Date Spr 64 59p.
Relocatable School Facilities.
Educational Facilities Laboratories, New York, New York
EDRS not available
Educational Facilities Laboratories, 477 Madison Avenue, New York, New York 10022.

Descriptors: educational facilities; classroom design; classroom arrangement; mobile classrooms; flexible facilities; construction costs; interior space; architectural programing; structural building systems; component building systems; prefabrication; photographs; school planning; enrollment trends; lighting; climate control; classroom furniture

The support that fluctuating school enrollments and the shortage of classrooms lend to the need for relocatable facilities is discussed; the development of these facilities is considered. Guides for planning relocatable structures include the following: four basic types and adequate space, appearance of the units, and the relationship of the units to the main buildings; portable facilities and size limitations, structural system, limits to moving, and foundation; size limits, structure, and foundation of mobile, divisible, and demountable facilities. Factors to consider in calculating costs, a checklist of items relevant to moving the facilities, and an estimate of demounting costs are provided. Case studies of movable classrooms in 21 cities give specifications and photographs of the facilities. New developments in portable units and a plan for the future are included. (RP)

ABSTRACT 11143

EC 01 1143 ED N.A.
Publ. Date Nov 68 6p
Niemoeller, Arthur F

Acoustical Design of Classrooms for the Deaf.

Central Institute For The Deaf, St. Louis, Missouri
Nebraska University, Lincoln, Teachers College, Department Of Educational Administration;

Office Of Education (DHEW); Washington, D. C., Captioned Films For The Deaf

EDRS not available

American Annals Of The Deaf; V113 N5 P1040-5 Nov 1968

Descriptors: exceptional child education; aurally handicapped; deaf; classroom design; acoustics; acoustical environment; flooring; ceilings; ventilation; site selection

Acoustical design of classrooms for the deaf is discussed, with its objectives of providing both large signal and low noise levels. Aspects described include reverberation time, noise criteria, location of the classrooms, and location of the school building. For each, building details and finishing materials are prescribed; acoustical data are specified when relevant. Two figures and three references are provided. (JD)

ABSTRACT 11147

EC 01 1147 ED N.A.
Publ. Date Apr 67 16p.

Jackson, William D.
Media Production Facilities in Schools for the Deaf.
Tennessee University, Knoxville, Southern Regional Media Center For The Deaf

Nebraska University, Lincoln, Teachers College, Department Of Educational Administration;

Office Of Education (DHEW), Washington, D. C., Captioned Films For The Deaf

EDRS not available

Paper Prepared For Symposium On Research And Utilization Of Educational Media For Teaching The Deaf (Lincoln, Nebraska, April 10-12, 1967).

Descriptors: exceptional child education; aurally handicapped; instructional materials; audiovisual aids; educational needs; special schools; books; films; deaf; school libraries; instructional materials centers; material development; photography; display panels; educational equipment; library services

Past and present inadequacies of instructional facilities are reviewed with emphasis placed upon present facilities and recent relevant federal legislation for the deaf. Commercially produced materials are criticized and the need for modification and production of media is presented. Characteristics of schools for the deaf to be considered in developing a framework for local production are listed; three phases are then proposed for the development of facilities for media production, including preplanning, setting up, and implementing the program. Specifications are given for the facilities themselves, and the following production techniques are explained: illustration, preservation, identification, duplication, photography, and display. (JD)

ABSTRACT 11150

EC 01 1150 ED N.A.
Publ. Date Mar 67 32p.

Caudill, William

What Works and What Fails in School Design.

EDRS not available

Nation's Schools; V79 N3 Mar 1967

Descriptors: gymnasiums; dining facilities; classroom design; flooring; movable partitions; flexible facilities; library facilities; ceilings; climate control; glass walls; school design; school planning; educational facilities; corridors; classroom arrangement; school space; space utilization; building materials; lighting; architectural elements

One hundred and ten innovations and design features are presented with sketches and descriptions. Commentary includes the advantages or disadvantages of the features and is intended to provide those interested in school planning or construction with some idea how projects did or did not work or how they were or could be modified to be more valuable. (RP)

ABSTRACT 11537

EC 01 1537 ED 029 439
Publ. Date Jul 67 43p.

Making Facilities Accessible to the Physically Handicapped.

New York State University Construction Fund, Albany

Vocational Rehabilitation Administration (DHEW), Washington, D. C.

EDRS mf, hc

State University Construction Fund, 194 Washington Avenue, Albany, New York 12210.

Descriptors: exceptional child education; handicapped children; design needs; campus planning; college buildings; educational facilities; facility guidelines; dormitories; sanitary facilities; building design; physically handicapped; visually handicapped; aurally handicapped; parking facilities; fire protection; State University of New York

Guidelines on performance criteria for the State University of New York consider two main types of handicapped: the ambulant and semi-ambulant, including some physically handicapped, the visually and aurally handicapped, and persons with cardiac conditions; and persons confined to wheel chairs. The handicapped and planning for them are discussed. Specifications are detailed for the following aspects of exterior design: entrances, ramps, stairs, doors, walks, intersections, gratings and manholes, parking, and bus service. Interior design criteria cited are for general university facilities, restrooms, bedrooms, stairs, elevators, doors, conveniences, and fire protection. Persons involved in or contributing to the study are named, and 19 references are listed. (JD)

ABSTRACT 11595

EC 01 1595 ED N.A.
Publ. Date 67 64p.

The Intermediate School; The Report of an Architectural Design Competition for the Conversion of New York City's Joseph H. Wade Junior High School (J 117 Bronx) to House; New Life for Old Schools.

Great Cities Program For School Improvement, Chicago, Illinois, Research Council

EDRS not available

The Research Council Of The Great Cities Program For School Improvement, 5400 North St. Louis Avenue, Chicago, Illinois 60625.

Descriptors: exceptional child education; building design; school design; classroom design; classroom arrangement; library facilities; school shops; audiovisual centers; dining facilities; auditoriums; offices (facilities); junior high schools; resource centers; laboratories; gymnasiums; flexible facilities; architectural elements; construction needs

Results of an architectural design competition to convert a junior high school into a more modern and flexible facility in which students could be divided into three smaller groups are presented. A summary lists the required educational components: classrooms, including science labs, typing, art, home economics and industrial arts, and music rooms; auxiliary rooms such as the library, audiovisual center, teachers' planning center, science preparation and storage rooms, and a resource center; administrative offices; gym and locker rooms; an auditorium; a cafeteria including two dining rooms, serving units, storerooms, and food preparation and cleanup rooms; four storage rooms; toilets; and custodial employees' rooms. Floor plans and diagrams are provided of the designs of the five architectural firms which won the top prizes and honorable mention and two firms which received special mention. (RP)

ABSTRACT 11691

EC 01 1691 ED 031 011
Publ. Date Apr 67 43p.

Outdoor Recreation Planning for the Handicapped. Bureau of Outdoor Recreation Technical Assistance Bulletin.

Department Of The Interior, Washington, D. C., Bureau Of Outdoor Recreation;

National Recreation And Park Association, Washington, D. C.

EDRS mf

Superintendent Of Documents; U S Government Printing Office Washington, D. C. 20402 (\$0.40).

Descriptors: exceptional child services; handicapped children; recreational facilities; design needs; multiply handicapped; recreation; physically handicapped; special health problems; individual characteristics; playgrounds; swimming pools; camping; agency role; visually handicapped; natural sciences; sanitary facilities; state agencies; private agencies; aurally handicapped; mentally handicapped; emotionally disturbed

The requirement that the handicapped be given special consideration as prerequisite to state participation in the Land and Water Conservation Fund Program is stated, and the following groups of handicapped are specified: the physically, visually and aurally handicapped, and those persons with special health problems; the mentally retarded; the emotionally disturbed; and the multiply handicapped. Their limitations and what can be done in general and in research to help are discussed. Modification of playgrounds and facilities and equipment for swimming, camping, fishing and boating is described; and national, state, and private agencies in several areas which can help are mentioned and their addresses are given. Case histories are provided of a self guiding nature trail in Aspen, Colorado, camping in San Francisco, California, and adaptation of recreation facilities in New York State (including park planning, access, toilet facilities, swimming pools, picnic areas, play areas, and miscellaneous facilities). Sixty-four references are cited (JD)

ABSTRACT 11990

EC 01 1990 ED 031 022
Publ. Date 68 53p.

Yukor, Harold E. And Others
The Modification of Educational Equipment and Curriculum for Maximum Utilization by Physically Disabled Persons; Design of a School for Physically Disabled Students.
Human Resources Center, Albertson, New York
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child education; physically handicapped; design needs; building design; architectural programing; architectural elements; doors; corridors; flooring; lighting; classroom design; chalkboards; equipment storage; science laboratories; library facilities; dining facilities; recreational facilities; swimming pools; sanitary facilities; parking areas

Elements of modified school design for the physically disabled are considered, including mobility, classrooms, science laboratories, applied skill areas, the library, the swimming pool, and sanitary facilities. Also discussed are the cafeteria (food service, seating, and other considerations), recreational areas (play grounds, gymnasium-auditorium, and auditorium), closets and storage areas (clothing storage, lockers, and supplies and equipment storage), and parking areas (parking lots and loading areas). (JD)

ABSTRACT 20392

EC 02 0392 ED N.A.
Publ. Date Sep 69 4p.
Shores, Richard E.; Haubrich, Paul A.
Effect of Cubicles in Educating Emotionally Disturbed Children.
EDRS not available
Exceptional Children; V36 N1 P21-4
Sept 1969

Physical Facilities

Descriptors: exceptional child research; emotionally disturbed; attention control; academic performance; behavior change; environmental influences; classroom arrangement

The effect of cubicles in educating emotionally disturbed children was evaluated in terms of promoting attending behavior and academic rate of reading and arithmetic. A significant difference was found in attending behavior favoring use of the booths, and nonsignificant differences were found with academic behaviors, indicating that attending behavior was increased by utilizing cubicles, but academic rate was not so influenced. (Author)

ABSTRACT 20683

EC 02 0683 ED N.A.
Publ. Date (69) 60p.

Lauder, Ruth
The Goal Is: Mobility! Background Information on Environmental Barriers and Transportation.
Social And Rehabilitation Service (DHEW), Washington, D. C.
EDRS not available
U. S. Department Of Health, Education, And Welfare, Social And Rehabilitation Service, Washington, D. C. 20201.

Descriptors: exceptional child research; physically handicapped; physical facilities; design needs; legislation; physical environment; human engineering; transportation; conference reports; recreational facilities; cooperative programs

The report on persons with physical disabilities considers housing; streets, buildings and other public places; transportation, both urban and intercity; recreation, indoor and outdoor; recommendations that should be made concerning legal questions and educational needs; and the process of reporting and publicizing the conference and its aims. Selected references are included, most with brief annotations. (LE)

ABSTRACT 20829

EC 02 0829 ED 032 696
Publ. Date 59 67p.

Gordon, Ronnie
The Design of a Pre-School Learning Laboratory in a Rehabilitation Center.
Institute Of Rehabilitation Medicine, New York University, New York, Medical Center
EDRS mf,hc

Descriptors: exceptional child education; physically handicapped; classroom design; instructional materials; classroom furniture; offices (facilities); facility requirements; physical design needs; furniture design; special health problems; physical facilities; space utilization; preschool children; design needs; educational facilities

A developmental setting for multi-handicapped preschool children and the physical layout of the classroom are described. Photographs and drawings of specially designed educational equipment, such as a shallow sand and water table adapted for wheelchair-bound

children and an adjustable easel that allows armless children to paint with their feet, show the use of the materials and their design construction. Commentary is included which describes the function and purpose of each learning material along with the history of the school, its medical setting, and the educational philosophy of the program. (WW)

ABSTRACT 20830

EC 02 0830 ED 032 697
Publ. Date 67 207p.

Goldsmith, Selwyn
Designing for the Disabled.
Royal Institute Of British Architects, London
EDRS not available
RIBA, 66 Portland Place, London W1, England.

Descriptors: exceptional child services; physically handicapped; building design; architectural programing; facility requirements; design needs; space utilization; physical facilities; facility guidelines; doors; heating; sanitary facilities; lighting; communications; flooring; physical design needs; psychological design needs

Implications of the merits of normality and independence for the disabled, and their relevance to architectural design criteria are discussed. The introduction reflects the philosophical approach to the design and construction of public buildings and housing. Nine principle sections provide data and recommendations on the following topics: anthropometric considerations of disabled people; building elements and finishes (staircases, handrails, windows, doors, floor finishes); service installations (refuse disposal; heating, electrical services, communications, mechanical installations); general spaces (entrances, kitchens, living and dining rooms, bedrooms, sanitary accommodations, laundry, garages); public buildings (office buildings, transport, health, recreation, auditoriums, schools, hotels); and domestic housing (planning of dwellings, checklist of recommendations). An appendix lists cost implications, definitions of terms, selected references, bibliographical references, and organizations associated with the welfare of the disabled. Illustrations with dimensions given in feet and metric equivalents are provided. (WW)

ABSTRACT 20854

EC 02 0854 ED 025 082
Publ. Date 68 106p.

Crane, Helen B., Ed.
Easter Seal Guide to Special Camping Programs.
National Easter Seal Society For Crippled Children And Adults, Chicago, Illinois, Task Force On Special Camping
EDRS not available
The National Easter Seal Society For Crippled Children And Adults, 2023 West Ogden Avenue, Chicago, Illinois 60612 (e-45, 1:5m:668, \$1.50).

Descriptors: exceptional child education; recreation; program planning; administration; standards; camping; handicapped children; resident camp programs; equipment standards; counselor qualifications; environmental criteria; budgeting; recreational activities; facility guidelines; administrative policy; administrator guides; health personnel; safety; personnel policy

Intended for organizations having or planning to establish resident camping programs for people with special needs, this guide supplements the American Camping Association's Standards. The philosophy, aims, and objectives of specialized camping programs are considered and the following are discussed: administration, camp site selection, legal matters, insurance, budget and finance, buildings and facilities, admission and followup procedures, personnel, health and safety, and programing and activities. The appendix includes samples of forms and records used in special camping programs and standards specified by the United States of America Standards Institute for making buildings and facilities accessible to and usable by the physically handicapped. A 33-item annotated bibliography and a list of national organizations and their addresses are also included. (LE)

ABSTRACT 20939

EC 02 0939 ED 032 664
Publ. Date Jan 68 57p.
Housing for the Physically Impaired; a Guide for Planning and Design.
Department Of Housing And Urban Development, Washington, D. C., Housing Assistance Administration
EDRS mf

Superintendent Of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (\$0.45).
Descriptors: exceptional child services; physically handicapped; low rent housing; architectural programing; design needs; building design; federal aid; incidence; site selection; parking areas; landscaping; doors; corridors; sanitary facilities; equipment storage; food handling facilities; climate control; lighting; telephone communication systems; community rooms; safety equipment; older adults; United States Housing Act of 1937

Problems involved in providing homes for independent living for the physically handicapped, health impaired, or older adults are considered. Basic concepts of low rent housing preface a discussion of neighborhoods and site selection, access, ramps, pedestrian walks, parking, landscaping, and lighting. Guides for building design focus on entrances, corridors, stairs, elevators, incinerator chutes, laundry facilities, general storage, and mailboxes. Specifications are suggested for living units including the living room, kitchen, bedroom, bathroom, and storage area; the design of windows, doors, hallways, floors, lighting and heating units, and custodial quarters, and the provision of telephones, televi-

sions, an emergency signal system, and hot water are also treated. Recommendations are made for the following community areas: lounge, recreation room, kitchen, craft area, library, health clinic, washrooms, public telephones, drinking fountains, vending machines, and other areas. A bibliography lists 41 references. (RJ)

ABSTRACT 21288

EC 02 1288 ED 027 721
Publ. Date 68 5p.
Design Criteria for Public School Plants Accommodating the Physically Disabled.
Missouri State Department Of Education, Jefferson City, School Building Services
EDRS mf,hc

Descriptors: exceptional child education; architectural programing; building design; construction needs; criteria; design needs; facility guidelines; physical design needs; physically handicapped; school planning; school buildings

Criteria are presented for implementation in the design and construction of school buildings and facilities in order to obviate hazards to individuals with physical disabilities. Accommodations for the physically handicapped are considered for the following: public walks, parking lots, ramps with gradients and handrails, entrances; elevators or ramps for multiple story buildings, doors and doorways, stairs and handrails, toilet rooms and facilities, water fountains, and floors. (FS)

ABSTRACT 21498

EC 02 1498 ED N.A.
Publ. Date 67 58p.
Bayes, Kenneth
The Therapeutic Effect of Environment on Emotionally Disturbed and Mentally Subnormal Children; A Kaufmann International Design Award Study, 1964-66.
EDRS not available
Kenneth Bayes, 37 Duke Street, London W1, England.

Descriptors: exceptional child research; emotionally disturbed; mentally handicapped; environmental influences; architectural programing; therapeutic environment; space utilization; visual perception; behavior; building design; corridors; furniture arrangement; color planning; research needs; tactual perception; flexible facilities; research reviews (publications)

Environmental influences on emotionally disturbed and mentally handicapped children and the relationship between environment and therapy are investigated. The nature of space and of perception, animal and human behavior, and architectural psychology are described; also described are subjects relating to planning and form: planning for social relationships, transition between areas, avoidance of ambiguity, architectural character and scale, consideration of the size of groups, corridors and circulation,

room size and shape, flexibility, child participation, pattern and visual stimuli, furniture, and staff needs. Topics relating to color examined are color perception, the psychophysiological effect of color, color preferences, color schemes, and color and form. Sound, texture, temperature, time, smell, and symbolic significance are other sensory perceptions discussed; research methods and problems and research needs are suggested. A list of persons and institutions visited or consulted about environmental therapy is provided. (RP)

ABSTRACT 21673

EC 02 1673 ED 021 303
5p.

Gust, Tim; Shaheen, Elaine
References Concerning Architectural Barriers in Higher Education.
Pittsburgh University, Pennsylvania, Research And Training Center In Vocational Rehabilitation
Social And Rehabilitation Service (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: bibliographies; building design; college buildings; physically handicapped

A bibliography of references pertaining to architectural barriers to the handicapped is presented. The references center on the importance of architectural design for universities and colleges which make buildings and facilities accessible to, and usable by, the physically handicapped. (NS)

ABSTRACT 21944

EC 02 1944 ED 036 923
Publ. Date Apr 69 69p.
Educational Specifications for Hope School for Exceptional Children and Youth.
Jackson County Public Schools, Marianna, Florida
EDRS mf,hc

Descriptors: exceptional child education; mentally handicapped; educational specifications; school design; program proposals; physical environment; physical design needs; physical facilities; school construction; space utilization; classroom design

A presentation of the Hope School's physical plant and program specifications is introduced with a listing of the specifications committee, a history of the school, the needs of the children served, and a philosophy of teaching mentally handicapped children. Areas discussed are school-wide specifications, the administrative complex, the diagnostic room, layout for the primary developmental classroom, a learning environment complex, and a training readiness workshop. Additional considerations are for custodial storage space, school lunch services, the site plan, space requirements, space relationship diagrams, and an overall evaluation of the proposal. A glossary of terms and a bibliography are provided. (JM)

ABSTRACT 21962

EC 02 1962 ED 036 941
 Publ. Date (69) 22p.
An Adaptive Playground for Physically Disabled Children with Perceptual Deficits; The Magruder Environmental Therapy Complex.
 Orange County Board Of Public Instruction, Orlando, Florida
 Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education
 EDRS mf,hc

Descriptors: exceptional child education; physically handicapped; perceptual motor coordination; playgrounds; recreational facilities; preschool children; design needs; motor development; environmental criteria; physical facilities

Designed as a specialized play area for physically handicapped preschool children with perceptual deficits, the Magruder Environmental Therapy Complex (ETC) is described as a means to create an environment in which these children could function freely. Pictures are used to show children using the equipment and the architectural aspects of construction. A brief summary, the problem defined, the goal of ETC, the basic perceptual motor experiences of ETC, principle features of ETC and physical problems, testing plans designed to evaluate the effects of ETC, and early observations by teachers, therapists and aides indicating the benefits of the free, unstructured play area are detailed. (WW)

ABSTRACT 21964

EC 02 1964 ED 036 943
 Publ. Date (68) 87p.
Planning a Special Education Building for Chester County, Pennsylvania.
 Chester County Schools, West Chester, Pennsylvania
 Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education
 EDRS mf,hc
 BR-66-2125

Descriptors: exceptional child education; handicapped children; program improvement; educational facilities; county school systems; student placement; mentally handicapped; learning disabilities; emotionally disturbed; physically handicapped; visually handicapped; auditorially handicapped; student transportation; program planning; community; educational equipment; personnel; architectural programming; school design; Chester County (Pennsylvania)

Chester County (Pennsylvania) is described in terms of its demography and its school system; its special education program is also reviewed. Placement and program organization are outlined for the trainable mentally retarded, brain injured, socially and emotionally disturbed, and physically, visually, or auditorially handicapped. The need for program improvement is explained, including the need for facilities, equip-

ment, staff, and transportation. The planning process and conclusions are discussed as are 14 recommendations for the design of a county special education facility. Nine consultants' opinions are presented concerning a central facility as opposed to dispersion of classes; 10 consultants' reports are appended. An additional flier provides the architectural plans. (JD)

ABSTRACT 22031

EC 02 2031 ED 036 044
 Publ. Date 69 28p.
New Architecture for Mental Health; New York State Health and Mental Hygiene Facilities Improvement Corporation--Report to the Governor, 1969.
 New York State Health And Mental Hygiene Facilities Improvement Corporation, Albany
 EDRS mf,hc

Descriptors: exceptional child services; mentally handicapped; emotionally disturbed; drug addiction; construction programs; rehabilitation centers; health facilities; building design; facility improvement; mental illness; state schools; New York

The accomplishments of The Health and Mental Hygiene Facilities Improvement Corporation during the past years in creating needed hospitals and health centers for the mentally disabled is documented. The new facilities show awareness of architectural trends and new objectives in design in order to better serve the needs of the patient. Pictures and layout of the newly or partly completed rehabilitation centers, facilities for emotionally disturbed children, and buildings for the mentally retarded show the effort to increase therapeutic options at new or redesigned facilities. A progress report on new facilities over \$500,000 is given as are construction projects for the control of narcotic addiction. (WW)

ABSTRACT 22067

EC 02 2067 ED 034 377
 Publ. Date Mar 69 102p.
 Bednar, Michael J.; Haviland, David S.
The Role of the Physical Environment in the Education of Children with Learning Disabilities.
 Rensselaer Polytechnic Institute, Troy, New York, Center For Architectural Research
 Educational Facilities Labs, Inc., New York, New York
 EDRS mf

Descriptors: exceptional child education; environmental influences; facility case studies; interior space; learning disabilities; light; perceptually handicapped; physical environment; psychomotor skills

Current thinking on the role of the physical environment in special education is summarized in the report. The material has been synthesized into a position that has been developed through widespread contacts with special educators and architects interested

in the problem. The paper develops this position in nine topical areas: the concern; exceptionality, learning disabilities, special education, role of environment, environmental variables, environmental conceptualizations, program factors, and directions. The primary attempt has been to underscore the issues and to lay some ground-work for future efforts. (RK)

ABSTRACT 22084

EC 02 2084 ED 024 249
 Publ. Date 66 18p.
Making Facilities Accessible for the Physically Handicapped. Account Number 1 of the Public Acts of 1966.
 Michigan State Legislature, Lansing
 EDRS mf,hc

Descriptors: physically handicapped; building design; parking areas; design needs; sanitary facilities; environmental criteria

A physical handicap is defined as an impairment which affects an individual to the extent that special facilities are needed to provide for his safety. Facilities include the special design of parking lots, building approaches and entrances; stairs, ramps, doors, and multilevel floors; corridors; and rooms with sloping floors, fixed seats, or both. Other safety areas include special consideration of sanitary facilities, drinking fountains, telephones, location of switches, room identification, and installment of elevators. (LD)

ABSTRACT 22346

EC 02 2346 ED N.A.
 Publ. Date Mar 70 5p.
 Mooney, Lawrence P.
Construction Guidelines for Physical Therapy Departments.
 EDRS not available
 Physical Therapy; V50 N3 P349-53 Mar 1970

Descriptors: program planning; physical therapy; physical therapists; facility guidelines; health facilities

Guidelines are suggested for physical therapists who are involved in planning or remodeling health facilities. Planning processes are described with information concerning the therapist's role at each stage. Data provided by the hospital and architect are discussed as is the role of the project planning coordinator. (RJ)

ABSTRACT 22434

EC 02 2434 ED 034 385
 Publ. Date 67 66p.
 Yaker, Harold E., And Others
The Modification of Educational Equipment and Curriculum for Maximum Utilization by Physically Disabled Persons. Educational and School Equipment for Physically Disabled Students.
 Human Resources Center, Albertson, New York
 EDRS mf,hc
 OEG-2644 HRS-9

Descriptors: exceptional child education; physically handicapped; audiovisual

sual aids; auditoriums; crafts rooms; dining facilities; educational equipment; educational facilities; facility requirements; furniture; gymnasiums; library facilities; mobility aids; science facilities; study facilities; wheel chairs

Special education and school equipment for handicapped students, particularly for those in wheel chairs, are outlined with suggestions for increasing the quality and effectiveness of special education instruction. Guidelines are given for the provision of an adequate learning environment for handicapped students. Special furniture and equipment is discussed including tables and desks, bookcases and storage cabinets, chalkboards, audiovisual and communication aids, and mobility and postural equipment. Equipment needs in the different physical and functional areas within the school discussed included classrooms and laboratories, cafeterias, and recreational facilities. A reference list and appendix are provided. (TG)

ABSTRACT 22569

EC 02 2569

ED N.A.
76p.

(Suggestions and Solutions to Problems of Maneuverability for the Physically Limited Homemaker.)

Nebraska Heart Association, Omaha
Nebraska University, Lincoln, College
Of Agriculture And Home Economics
EDRS not available

Nebraska Heart Association, 430 South
40th Street, Omaha, Nebraska 68131.

Descriptors: physically handicapped; physical facilities; homemaking skills; home management; housewives; cleaning; self care skills; object manipulation; food handling facilities; sanitary facilities; clothing; design needs; equipment storage

A series of 10 pamphlets is designed to give the physically limited homemaker suggestions and practical solutions to problems of maneuverability in the home. Each bulletin is illustrated; topics include a discussion on easy to use kitchens, suggestions for an easy to use mixing center ideas or an easy to use cooking and serving center, materials geared for an easy to use sink center, and suggestions on kitchen storage facilities which require no stooping or stretching. Other bulletins cover the subjects of food and the family, fashions for physically limited women, ways to streamline household tasks, methods to make the bathroom safe and usable, and suggestions on the convenient organization of cleaning equipment. (WW)

ABSTRACT 22661

EC 02 2661

ED N.A.
82p.

Architectural Report: Mental Retardation Center.

Baylor University, Houston, Texas College Of Medicine;

Texas Medical Center, Houston;

Texas Children's Hospital, Houston

EDRS not available

Director Of Publications, Baylor Uni-

versity College Of Medicine, 1200 M. D. Anderson Street, Houston, Texas 77025.

Descriptors: exceptional child services; mentally handicapped; health facilities; medical services; institutional facilities; architectural programing; building design; space utilization; design needs; architecture; architectural elements

Architectural plans are introduced by discussions of the aims of the center, including team interaction, community orientation, training, research, treatment, coordinated services, parent-child relationship, patient load and processing, flexibility, flow, location, and environment. The design is broken down into the following areas: reception (lobby, waiting, services), community care (examination and offices, day center, habilitation, dining areas, training areas, meeting areas), living unit (administration, nurses' station and services, bedrooms, lounge and play areas), and administration (reception, executive, service and training, conference facilities, business, records and data processing, and housekeeping). Included in the design analysis are the possibilities of growth, aspects of climate, visibility, approach, easy transition, problems of personnel mixing and flow, a summary, and the actual architectural plans. (JM)

ABSTRACT 22571

EC 02 2971

ED N.A.
6p.

Publ. Date Jun 70

Witengier, Mary

An Adaptive Playground for Physically Handicapped Children.

EDRS not available

Physical Therapy; V50 N6 P821-6 Jun 1970

Descriptors: exceptional child education; physically handicapped; playgrounds; perceptual motor coordination; preschool children; perceptual development; motor development; Magruder Environmental Therapy Complex

The Magruder Environmental Therapy Complex was designed to provide 15 closely interwoven experiences in perception and a continuum of perceptual motor experiences for physically handicapped preschool children. The child's motivation for play is capitalized upon. The report describes the development of the play complex, as yet not completed, and states that preliminary evaluation indicates increased motor achievement and greater endurance in some children. A more scientific evaluation is planned. Photographs of play equipment accompany the article. (KW)

ABSTRACT 23066

EC 02 3066

ED N.A.
136p.

Publ. Date 68

Gutman, Ernest M.; Gutman, Carolyn R.

Wheelchair to Independence: Architectural Barriers Eliminated.

EDRS not available

Charles C Thomas, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$6.75).

Descriptors: physically handicapped; architectural barriers; building design; wheel chairs; physical environment; interior design; campus planning; school design; home furnishings

Means of eliminating architectural barriers for wheelchair users, to help solve some problems of daily living, education, and employment, are suggested and recommended to architects and builders. Architectural obstructions in both residential and public buildings are outlined, together with solutions. The book discusses adaptations for the home (bathroom, kitchen, dining room, floor, etc.) and various types of residences. Photos illustrate many of the conveniences. Specifications for a made-to-order house for a wheelchair user are presented. Lists of recommended standards for public buildings and of motels with wheelchair units are included in a discussion of current building trends. A review of campus facilities at colleges and universities includes suggested specifications for structures and a list of institutions currently enrolling wheelchair students. Adaptations for public schools, hospitals, and the telephone are also suggested. (KW)

ABSTRACT 30190

EC 03 0190

ED N.A.
14p.

Publ. Date 63

Classroom Lighting.

National Society For The Prevention Of Blindness, Inc., New York, New York

EDRS not available

National Society For The Prevention Of Blindness, Inc., 16 East 40th Street, New York, New York 10016 (\$0.15).

Descriptors: classroom environment; lighting; handicapped children; vision; illumination levels; physical environment

A number of aspects of classroom lighting are discussed including the importance of good lighting, factors influencing visual efficiency, quantity and quality of illumination, reflection, natural lighting, artificial lighting, maintenance, and teacher role. (MS)

ABSTRACT 30223

EC 03 0223

ED N.A.
3p.

Publ. Date Sep 70

Barden, John

Furniture for the Schoolroom.

EDRS not available

Special Education; V59 N3 P11-3 Sep 1970

Descriptors: exceptional child services; cerebral palsy; classroom furniture; furniture design; physically handicapped

Recounted is the history of the development of classroom furniture designed for the cerebral palsied student, but which can also be used by other students. Five items are described: an L-shaped desk, a table, two typing tables, and an aqua chair for use in hydrotherapy pods. Each item is adjustable in height and/or angle. A chair with over 10,000 possible variations in seat and back height and angle is also described. (KW)

ABSTRACT 30318

EC 03 0318 ED N.A.
 Publ. Date Oct 70 4p.
 Bernardo, Jose R.
Architecture for Blind Persons.
 EDRS not available
 New Outlook For The Blind; V64 N8
 P262-5 Oct 1976

Descriptors: visually handicapped; architecture; architectural design; building design; adjustment (blind persons); architectural programming

Discussed are the ways in which an architect must alter his priorities and redefine architecture in non-visual terms when designing buildings for blind persons. It is suggested that he consult with blind persons to determine how the environment he creates can convey information through the senses other than sight. Some possibilities for change are recommended to exploit non-visual clues, but the danger of a too protective and special environment are mentioned. (KW)

ABSTRACT 30363

EC 03 0363 ED N.A.
 Publ. Date (68) 24p.
 The Irene Heinz Given and John LaPorte Given Pre-School Pavilion and Environmental Laboratories: Human Resources Study No. 13.

Human Resources Center, Albertson, New York
 EDRS not available
 Human Resources Center, Albertson, Long Island, New York 11507.

Descriptors: exceptional child education; physically handicapped; preschool education; early childhood education; program descriptions; curriculum; rehabilitation programs; facilities; Human Resources Center; Given Preschool Program

The report of an experimental preschool program for children with severe physical disabilities at the Irene Heinz Given and John LaPorte Given School describes the physical design, environmental laboratories, lavatory facilities, medical services, curriculum and related activities, physical recreation, and transportation methods. Described as a preliminary report, the text is illustrated with photographs. (RD)

ABSTRACT 30424

EC 03 0424 ED 043 988
 Publ. Date Feb 68 107p.
 McGowan, John F.; Gust, Tim
Preparing Higher Education Facilities for Handicapped Students.
 Missouri University, Columbia
 Rehabilitation Services Administration (DHEW), Washington, D. C.
 EDRS mf,hc

Descriptors: exceptional child services; physically handicapped; architectural barriers; building design; facility improvement; campus planning; student personnel services; college buildings; Missouri University

The report summarizes significant events since 1959 in the University of Missouri's program to modify its physical plant and educational facilities and to organize and expand its student personnel services to enable handicapped students to attend the University. Reviewed are the program plan, site and building modifications, student services, and the current status of the program and recommendations for the future. Appendixes include photographs of campus modifications, and building, facility, and bus specifications. (KW)

ABSTRACT 30432

EC 03 0432 ED 043 996
 Publ. Date Jul 69 39p.

Taylor, T. K. And Others
Small Living Centers for Adult Retardates. Final Report.
 Arizona State Department Of Health, Phoenix, Department Of Mental Retardation
 Public Health Service (DHEW), Washington, D. C., Mental Retardation Division;
 Social And Rehabilitation Service (DHEW), Washington, D. C.
 EDRS mf,hc

Descriptors: mentally handicapped; institutionalized (persons); residential programs; facilities; surveys; adults

The study was undertaken to develop guidelines for the establishment of living centers for mentally handicapped adults. Findings from a questionnaire sent to about 75 facilities across the country are presented (legal form of operation, location, bed capacity, waiting list, admission restrictions, coeducational or one sex only, financial support, and fees). Thirteen residential facilities for the mentally handicapped were visited, and four facilities located in Arizona are described in detail. Special attention is paid to setting, staff, program, attitude of residents, and methods of buying, preparing, and serving food. Questionnaires used and linegraphs are included, as are guidelines for establishing programs and services for the mentally handicapped. (KW)

ABSTRACT 30480

EC 03 0480 ED N.A.
 Publ. Date Oct 70 4p.

Randolph, Leo Glenn
The Classroom Teacher Speaks: Don't Rearrange the Classroom. Why Not? A Proposal for Meaningful Classroom Mobility.
 EDRS not available
 Education Of The Visually Handicapped; V2 N3 P83-6 Oct 1970

Descriptors: exceptional child education; visually handicapped; classroom arrangement; visually handicapped mobility; mobility aids; furniture arrangement; visually handicapped orientation

The rearrangement of furniture in a classroom for the blind is encouraged along with suggested techniques for teaching mobility skills and systematic

relationships. Suggestions for rearrangement involving effective orientation and mobility principles are presented, and criteria for changing the classroom are described. Four techniques for room familiarization (perimeter, door object, criss cross, object object) are also provided. (RD)

ABSTRACT 30569

EC 03 0569 ED N.A.
 Publ. Date Aug 70 28p.

Skertich, George J.
Educational Specifications; Trainable Mentally Handicapped and Multiply Handicapped Facility.
 EDRS not available
 Thornton Area Public School Association, 250 West Sibley Boulevard, Dalton, Illinois 60419.

Descriptors: trainable mentally handicapped; multiply handicapped; educational facilities; facility requirements; building design

Educational specifications for a facility for the trainable retarded and multiply handicapped are described. Background information concerns the philosophy of the Thornton Area public school association, educational and design goals, and implications and considerations for the architect. Educational specifications are given in terms of general information, organizational and utilitarian plans, classroom areas, traffic, internal movement, groupings, special utilities, and service facilities. General area requirements are listed for the following: administrative complex, ancillary services, teachers' workroom and storage space, conference room, multi-purpose room, gymnasium, audio-visual center, prevocational area, greenhouse, home simulator, outdoor education and recreation, and service system requirements. (RJ)

ABSTRACT 30611

EC 03 0611 ED 044 852
 Publ. Date Dec 69 99p.

New Jersey State Plan for the Construction of Mental Retardation Facilities.

New Jersey State Department Of Institutions And Agencies, Trenton, Division Of Mental Retardation
 EDRS mf,hc

Descriptors: mentally handicapped; services; facilities; construction programs; state surveys; administrative policy; state programs; New Jersey

The plan details recommended procedures for the construction of mental retardation facilities in New Jersey. The Mental Retardation Planning Board and State Board of Control are described and members listed. Stated are methods of administration of the planning and construction program, and the basic program goals and policies. Four major regions of the state are delineated for planning purposes. Existing Services and Facilities are inventoried in detail. The final chapter outlines assigned priorities for construction applications from the four service regions. (KW)

ABSTRACT 30824

EC 03 0824 ED N.A.
 Publ. Date 70 2p.
Speech and Hearing Service in a Mobile TV Van.
 EDRS not available
 Educational Media; V3 N2 P12-3 Oct-Nov 1970

Descriptors: exceptional child education; aurally handicapped; speech handicapped; speech therapy; mobile classrooms; educational equipment; educational technology; televised instruction; audiovisual instruction: mobile television van

The equipment and services of a mobile television van used for speech and hearing therapy in California are discussed. The nature of the daily van program and specific information on the technical equipment are also provided. (RD)

ABSTRACT 30848

EC 03 0848 ED N.A.
 Publ. Date Dec 70 8p.
 Cruickshank, William M.; Quay, Herbert C.
Learning and Physical Environment: The Necessity for Research and Research Design.
 EDRS not available
 Exceptional Children; V37 N4 P261-8 Dec 1970

Descriptors: exceptional child education; educational facilities; architectural programing; research needs; school buildings; building design; classroom arrangement; research methodology; physical environment

The growing concern about planning and providing effective physical facilities for special education programs is presented. Particular emphasis is focused on the inadequacy of decisions made by special educators and architects regarding the nature of the physical environment in the absence of empirically obtained evidence. Supporting the need for such research, some of the difficulties encountered--the isolation of variables, management techniques, and design--are discussed. (Author)

ABSTRACT 31086

EC 03 1086 ED N.A.
 Publ. Date 70 24p.
Building Standards for the Handicapped--1970.
 National Research Council Of Canada, Ottawa, Associate Committee On The National Building Code
 EDRS not available
 Canadian Rehabilitation Council For The Disabled, Suite 303, 165 Bloor Street East, Toronto 285, Ontario, Canada (\$0.25).

Descriptors: physically handicapped; architectural specifications; standards; architectural barriers; building design; building equipment; wheel chairs; foreign countries; Canada

The booklet, which is a Supplement to the National Building Code of Canada, is written as a guide for persons in-

involved in the design, construction, or alteration of buildings with provisions for making them usable by the physically handicapped. The standards are recommended requirements, but have no legal standing unless they are adopted by a provincial government or municipal administration. Essential and desirable requirements are differentiated. Included are general dimensions of wheelchairs and space needed to function in a wheelchair or on crutches, and information on site development. The major portion of the booklet presents diagrams and specific recommendations related to buildings (entrances, doors, ramps, toilet rooms, vertical transportation, floors, water fountains, telephones, cafeterias, controls, lighting, and warning signals) and housing (including room layouts). (KW)

ABSTRACT 31101

EC 03 1101 ED N.A.
 Publ. Date 70 3p.
 Muller, Henrik
Well Planned Town Centers--A Contemporary Demand of the Handicapped.
 ICTA Information Centre, Bromma, Sweden
 EDRS not available
 ICTA Information Centre, Fack, S-161 03 Bromma 3, Sweden.

Descriptors: physically handicapped; services; physical environment; architectural barriers; design needs; rural areas; community planning; housing needs; models

The particular needs of handicapped persons in terms of structure of the physical environment and everyday services are discussed. In order to meet their demands on both private and public service facilities, the inclusion of all town center functions gathered within a central living area (a center) in the small and medium-sized agglomerations in sparsely populated rural areas is recommended. This implies the inclusion in one center of the five following functions: housing, place of work, service (shops, medical services, church, library, theater, schools, health center), transportation, and open-air facilities. Pictured is a diagrammatic model illustrating a center containing these full town center facilities. (KW)

ABSTRACT 31127

EC 03 1127 ED N.A.
 Publ. Date Dec 70 3p.
 Pomeroy, Diana
Rethinking the Bedroom Image.
 EDRS not available
 Special Education; V59 N4 P24-6 Dec 1970

Descriptors: handicapped children; building design; residential care; physical environment; architectural programing; environmental influences; institutionalized (persons); bedroom environment

The importance of the bedroom environment in residential special schools,

and the need for increased attention to its architectural design are emphasized. The author reports her study of 20 residential schools housing various types of handicapped children. Each school was visited and interviews were conducted to assess the opinions of the staff and children. Characteristics of the bedroom environments were analyzed including groupings per bedroom, types of social relationships, group interaction, and the significance of the bed space. (RD)

ABSTRACT 31150

EC 03 1150 ED N.A.
 Publ. Date 70 28p.
Barrier Free Architecture.
 Committee On Architectural Barriers, Washington, D. C.
 EDRS not available
 Potomac Valley Architect; V10 N8 P1-28 Nov/Dec 1970

Descriptors: special health problems; physically handicapped; architects; architectural barriers; guidelines; discussion; American Institute of Architects (Potomac Valley Chapter)

Designed as a guide for American Institute of Architects (AIA) chapter seminars, the booklet outlines the format used for a conference in Washington (held by the Potomac Valley Chapter) on architecture for the handicapped. The idea of architecture for everybody is emphasized. The goals and conclusions of the National Commission on Architectural Barriers are also presented. (CD)

ABSTRACT 31247

EC 03 1247 ED 046 163
 Publ. Date 69 207p.
 Rogerson, Robert W. K. C.; Spence, Philip H.
A Place at Work: The Working Environment of the Disabled.
 EDRS not available
 Robert MacLehose And Company, Ltd., University Press, Glasgow W. 3, Scotland.

Descriptors: exceptional child services; handicapped; architecture; environmental research; architects; building design; rehabilitation centers; sheltered workshops; equipment evaluation; habilitative aids

Designed for the architect and student, the text concerns the health of the disabled as seen through the eyes of the architect. The total environment of the handicapped is the focal point of the approach. It begins with schools, then looks at medical treatment and rehabilitation as dealt with in hospitals, special rehabilitation centers, and occupational therapy units. Sheltered workshops are dealt with at length, followed by a look at factories offering open employment. Workshop design and equipment used are examined as well as the surroundings of the special buildings. Floor plans, diagrams, and photographs supplement the text, and recommendations and guides to be used by those commissioning architects are included. (CD)

ABSTRACT 31262

EC 03 1262 ED 046 177
Publ. Date 69 46p.

Wickersham, Julia M. And Others
Educational Specifications for the Exceptional Child Center: Facility for the Trainable Mentally Retarded.
Duval County Schools, Jacksonville, Florida
Florida State Department Of Education, Tallahassee
EDRS mf,hc

Descriptors: exceptional child education; trainable mentally handicapped; architectural programing; educational facilities; educational equipment; mentally handicapped; program descriptions; classroom furniture; primary grades; intermediate grades; family life education; Florida

Educational specifications for a physical plant facility for trainable mentally handicapped children (for Duval County, Florida schools) are detailed in the document. Goals, objectives, and program content and activities (for primary, intermediate, preoccupational and family living levels) are outlined, including furniture and equipment listings, and special considerations for each level. Diagrams and floor plans for the plant facility are included. (CD)

ABSTRACT 31263

EC 03 1263 ED 046 178
Publ. Date 69 52p.

Educational Specifications for Special Education Facility.
Dade County Public Schools, Miami, Florida
EDRS mf,hc

Descriptors: exceptional child education; handicapped children; educational facilities; architectural programing; educational equipment; classroom arrangement; Florida

Educational specifications for an educational facility are detailed in the report. Space requirements, daily schedules, and equipment (for the aurally, visually, intellectually, emotionally, learning, and motor disabled) are discussed and diagrams are provided. (CD)

ABSTRACT 31264

EC 03 1264 ED 046 179
Publ. Date 69 15p.

Educational Specifications for Center for Trainable Mentally Retarded.
Alachua County School Board, Gainesville, Florida
Florida State Department Of Education, Tallahassee
EDRS mf,hc

Descriptors: exceptional child services; trainable mentally handicapped; educational specifications; educational facilities; mentally handicapped; program proposals; building design; architectural programing

Educational specifications for a center for trainable mentally handicapped children are outlined. Philosophy and objectives, and discernible curriculum

trends for the future are provided. The site (planning, development, playground area, pupil transportation), the program (what the teacher does, what the student does or way of work, size of groups, school day--hours for students and teachers), space requirements (two pre-primary rooms, two primary, and two intermediate rooms, supplementary office area, one clinic, one teacher's workroom, outside storage space for physical education equipment, and custodial storage space), special considerations (safety), and arrangement of facilities are discussed. (CD)

ABSTRACT 31275

EC 03 1275 ED 046 186
Publ. Date Jun 70 49p.

Graves, La Verne and others
Educational Specifications for a Facility for Trainable Mentally Retarded.
Marion County School Board, Ocala, Florida
EDRS mf,hc

Descriptors: exceptional child services; trainable mentally handicapped; educational facilities; architectural programing; mentally handicapped; program design; equipment utilization; Florida

Educational specifications for a facility for trainable mentally handicapped children are outlined. The educational programs of the school, overall facilities list, and area specifications are cited. Such areas as school lunch services, toilets, and custodial and mechanical equipment are discussed. (CD)

ABSTRACT 31276

EC 03 1276 ED 046 187
Publ. Date Apr 70 24p.

Secondary Educational Specifications Special Education Supplement.
Bay County School Board, Panama City, Florida
EDRS mf,hc

Descriptors: exceptional child services; educable mentally handicapped; secondary school students; educational facilities; educational specifications; mentally handicapped; architectural programing; educational philosophy; curriculum design

Educational specifications for secondary educable mentally handicapped children are discussed. The philosophy, instructional programs, space needs, storage, special considerations (environmental, utilities), and relationships (within the program, to closely related programs) are covered. (CD)

ABSTRACT 31634

EC 03 1634 ED N.A.
Publ. Date 70 120p.

Nellist, Ivan
Planning Buildings for Handicapped Children.

EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703.

Descriptors: mentally handicapped; emotionally disturbed; design needs; institutional environment; building design; classroom arrangement; classroom environment

stitutional environment; building design; classroom arrangement; classroom environment

Written to provide information helpful to designers and others concerned with the environment of mentally retarded and emotionally disturbed children, the book describes how buildings and rooms can be designed and furnished to make a positive contribution to the well-being, education, and development of such children. Brief reference is made to the design needs caused by physical handicaps since they sometimes coincide with mental ones. The discussion of how best to meet the children's needs in an effective total environment covers types of buildings and overall planning of facilities. Specific activities carried on in institutions and schools are examined to determine appropriate design requirements. Various types of finishes, and the use of color, pattern, and texture in environment are considered. Throughout the text comment is also made on design features which are best not used, and diagrams and photographs illustrate good and poor design. (KW)

ABSTRACT 31656

EC 03 1656 ED N.A.
Publ. Date 70 88p.

Hoffman, Ruth B.
How to Build Special Furniture and Equipment for Handicapped Children.

EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$6.50).

Descriptors: physically handicapped; equipment; furniture design; design needs

Instructions and specifications are given for the construction of furniture and equipment for handicapped children. Items described can be made simply and inexpensively from scrap wood, in a limited space, and with comparatively few tools. Included are chairs for use on a highchair, on the floor, in a wheelchair, in a car, in a bathtub, for children who slump sideways or with back curvature, a chair on wheels, and a potty chair. Other items are a standing board, table, standing table, canvas binder for car travel, creeper, tub frame, board on wheels, wedge board, and slant board. (KW)

ABSTRACT 31776

EC 03 1776 ED 047 478
Publ. Date 67 899p.

Wilshire, E. Rosamond, Comp.
Equipment for the Disabled. Volumes 1-4.

National Fund for Research Into Poliomyelitis and Other Crippling Diseases, London, England

EDRS not available
Rehabilitation International, 219 East 44th Street, New York, New York 10017 (\$20.00).

Descriptors: physically handicapped; equipment; architectural programing;

equipment utilization; homemaking skills; architecture; habilitative aids

Four volumes of equipment for the disabled which can simplify their lives and those who live with them are presented. The authors have not included surgical, medical, therapeutic, corrective or gymnastic equipment in the publication. Volume one includes house adaptations and planning, beds and bed accessories, chairs, and wheelchairs and accessories; volume two deals with hoists and lifting equipment, tables and overbed frames, communication, devices for upper limb disorders, and eating and drinking; volume three covers personal toilet, clothes and dressing, and household needs; and volume four encompasses the kitchen, disabled mother and child, hobbies and games, walking aids, and transportation. Details of prices and suppliers where applicable are provided. (CD)

ABSTRACT 31779

EC 03 1779 ED 047 481
Publ. Date 70 131p.

Beit, J. W.

State of Alaska Plan for Construction of Facilities for the Mentally Retarded.

Alaska State Department of Health and Welfare, Juneau

EDRS mf, hc

Descriptors: exceptional child services; mentally handicapped; architectural programming; facilities; state programs; state aid; state surveys; incidence; program development; Alaska

The 1970 Alaska state plan for construction of facilities for the mentally retarded is discussed. State agency organization charts, methods of administration, program goals and policies, an election district map showing catchment areas and Indian reservations, an explanation of inventories, and a survey of need and ranking of areas comprise the plan. An appendix covers characteristics of the mentally handicapped, statutes and codes, progress made in implementing the plan, and guidelines for the future. (CD)

ABSTRACT 31805

EC 03 1805 ED N.A.
Publ. Date 70 90p.

Mental Retardation Facilities Construction Plan: Fiscal Year 1969.

Maine State Department of Mental Health and Corrections, Augusta, Bureau of Mental Retardation

EDRS not available

Department of Mental Health and Corrections, Bureau Of Mental Retardation, Room 700, State Office Building, Augusta, Maine 04330.

Descriptors: exceptional child services; mentally handicapped; facilities; federal legislation; state programs; state federal aid; Maine; Public Law 88-164

The text is a public document intended to guide the expansion and development of needed facilities in the state of Maine. Compilation is pursuant to the Mental Retardation Facility and Community

Mental Health Centers Construction Act (P.L. 88-164). Both long and short range goals for development of a plan integrated with other health facilities to meet the needs of approximately 30,000 Maine citizens with mental retardation are presented. Such areas of concern as methods of administration, application process for construction and staffing grants, goals for construction, services for the retarded by regions, and delineation of planning regions are covered. A state map indicating the regions and an inventory of existing mental retardation facilities are provided. (CD)

ABSTRACT 31850

EC 03 1850 ED N.A.
Publ. Date (69) 68p.

Nelson, William R., Jr.

Design Study.

EDRS not available

Dixon State School, 2600 North Brinton Avenue, Dixon, Illinois 61021.

Descriptors: exceptional child services; mentally handicapped; institutionalized (persons); architecture; design needs; building design; state schools; Illinois

The study was undertaken to analyze the physical appearance and character of the environment at the Dixon State School (for mentally handicapped), Dixon, Illinois. The concern is with the existing physical relationships and how they might be utilized for maximum benefit of resident and staff. The result of the study is a group of recommended design solutions to better use the landscape potential. The study points out the primary problems within the institution and presents some of the preferred solutions in sketch form. The design plan encompasses objectives, circulation, parking, pedestrian space and landscape elements, building treatment, outdoor dayrooms, landscape plantings, playgrounds, horticultural therapy, and maintenance. (CD)

ABSTRACT 31888

EC 03 1888 ED N.A.
Publ. Date 71 3p.

Columbus, Dorothy; Fogel, Max L. Survey of Disabled Persons Reveals Housing Choices.

EDRS not available

Journal of Rehabilitation; V37 N2 P26-8 Mar-Apr 1971

Descriptors: handicapped; physically handicapped; housing; facilities; surveys; attitudes

A sample of 455 disabled persons (mean age 51 years) in a large metropolitan area were asked to select the type of housing facility in which they would most like to live and the one in which they would least like to live from the following choices: a facility designed only for the physically disabled (A), mainly for the nondisabled but accommodating some disabled persons (B), mainly for the physically disabled but accommodating a few non-disabled persons (C), or for the physically disabled and non-disabled elderly people together (D). Regardless of comparisons made between choices and

variables of age, type of disability, sex, income, independence, and others, the majority of subjects consistently most preferred B. The least preferred choice was A. Fluctuations which did occur were most related to age groups. After age 60, subjects were less reluctant to reject D, while the youngest group strongly rejected D, reflecting acceptance of disabilities and rejection of the aged by the young. As the level of independence decreased, the desire to live with a non-disabled population also decreased, although the majority still preferred B, as in the other comparisons. Persons with visible disabilities accepted housing designed for the disabled more than did those with non-visible types of problems. (KW)

ABSTRACT 31978

EC 03 1978 ED N.A.
Publ. Date Mar 71 4p.

Ellison, Herbert

An Open Plan for Elleray Park.

EDRS not available

Special Education; V60 N1 P21-4 Mar 1971

Descriptors: exceptional child education; physically handicapped; building design; open plan schools; architecture; teacher attitudes; teaching methods; student reaction; Great Britain

The architectural design for a school for physically handicapped children is described and the reactions of both the teachers and the children are discussed. A diagram of the open plan design used and a description of the layout are provided. The gradual adaption of the staff to such an arrangement and the architectural effects on teaching methods, with the solo performance by the teacher giving way to more group and individual work by the children, are noted. (CD)

ABSTRACT 32217

EC 03 2217 ED 050 503
Publ. Date 71 106p.

Mental Retardation Construction Program.

Department of Health, Education, and Welfare, Washington, D. C., Secretary's Committee on Mental Retardation

EDRS mf

Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (\$1.00).

Descriptors: exceptional child services; federal aid; mentally handicapped; facilities; directories; federal legislation; research and development centers; universities; Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963

The current status of three federally supported construction programs of facilities for the mentally handicapped is reviewed. The programs discussed are designed to provide assistance in the areas of continuing research into causes and means of prevention of mental retardation, interdisciplinary training of professional personnel, and establishment of community facilities. Research centers

operating under the program (P.L. 88-164), are described including location, area of study and funding statistics. University-affiliated facilities for the mentally handicapped set up to provide clinical training of professional personnel are examined. A brief description of each facility reviews the types of facilities and programs which have been supported with the funds and the current status of their construction. Community facilities approved for federal assistance under the construction program are listed by state and pertinent data such as type of facility, services available, retarded served, and estimated costs, are supplied in chart form. (CD)

ABSTRACT 32684

EC 03 2684 ED 051 620
 Publ. Date 71 320p.
 Grall, Terrand Bernard
Designing for the Non-Ambulatory.
 Wisconsin University, Madison
 EDRS mf,hc
 Author's Masters Thesis Submitted to the University Of Wisconsin.

Descriptors: physically handicapped; mobility aids; design needs; masters theses

Presented is a manner of organizing and grouping performance information to support the design and development of physical movement aids for non-ambulatory persons which enable them to ambulate or at least change their position in a semiambulatory fashion. Hierarchical levels of psychobiologic deficiency and corresponding condition variables are given for the various physically handicapping conditions which result in non-ambulation. Information on performance characteristics is intended to be used in design research for determining abilities and needs of specific non-ambulatory groups at all levels of non-ambulation and for determining the characteristics which the proposed dynamic artificial aids must possess. A case study using the data provided is included to illustrate that a psychobiologic approach to design is possible and to indicate the type of reasoning which needs to be followed in developing design solutions. (KW)

ABSTRACT 32813

EC 03 2813 ED N.A.
 Publ. Date (69) 82p.
 Wheeler, Virginia Hart
Planning Kitchens for Handicapped Homemakers.
 New York University Medical Center, New York, Institute of Physical Medicine and Rehabilitation
 Vocational Rehabilitation Administration (DHEW), Washington, D. C.
 EDRS not available
 New York University Medical Center, Institute of Physical Medicine and Rehabilitation, 550 First Avenue, New York, New York 10016 (\$2.00).

Descriptors: physically handicapped; adults; wheel chairs; equipment utilization; design needs; home economics; daily living skills

Designed to be used in the vocational rehabilitation of homemakers, the handbook was planned especially for severely disabled women who could not return to their usual duties unless their home kitchens were substantially modified. The importance of kitchen planning and the need to elicit as much information as possible about family and homemaker use of the area are discussed with the aim of working out arrangements ideal for each individual. Each item in the kitchen, from appliances to furniture to utensils, is considered and ways are suggested to make the most of limited space and money. Attention is directed to the need for exact measurements of both the patient's kitchen and physical range of motion so that redesigning can be done, even by long distance. Although most of the book concerns the wheelchair homemaker, one chapter considers adaptations for the ambulatory woman. Suggestions for a source list of equipment and appliances are included. (RJ)

ABSTRACT 32909

EC 03 2909 ED N.A.
 Publ. Date (71) 210p.
 Joy, Gordon F.
Directory of Workshops in Canada Serving the Handicapped.
 EDRS not available
 Manpower Utilization Branch, Department of Manpower And Immigration, Ottawa, Ontario, Canada.

Descriptors: handicapped; directories; community services; rehabilitation centers; employment opportunities; sheltered workshops; foreign countries; Canada

Printed in English and French, the directory contains a color-coded section for each Canadian province that includes community and general workshops of rehabilitation, business enterprises employing primarily handicapped employees, programs for the mentally retarded, programs for the blind, and miscellaneous. Where applicable, each entry includes organizational name, address, manager's name, number of clients served, and nature of service. A table lists the type of rehabilitation workshops, the province totals for a number of workshops and number of clients served, and Canadian totals for number of workshops and number of clients served. (CB)

ABSTRACT 33022

EC 03 3022 ED 053 519
 Publ. Date Feb 71 13p.
Directories of Services and Facilities: Exceptional Child Bibliography Series.
 Council for Exceptional Children, Arlington, Virginia. Information Center on Exceptional Children
 Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.
 EDRS mf,hc
 The Council for Exceptional Children, 1411 South Jefferson Davis Highway, Suite 900, Arlington, Virginia 22202.

Descriptors: exceptional child services; handicapped children; services; annotated bibliographies; directories; bibliographies; educational programs; facilities

ed bibliographies; directories; bibliographies; educational programs; facilities

Contained in the annotated bibliography, which is one of a series of over 50 similar selected bibliographies dealing with exceptional children, both handicapped and gifted, are 50 references to directories of services and facilities for exceptional children. Covered are such services and facilities as clinics, camping programs, special classes and schools, day care programs, medical services, agencies, and residential programs. Entries were selected from Exceptional Child Education Abstracts, and bibliographic data, availability information, indexing and retrieval descriptors, and an abstract are given for each entry. Subject and author indexes to the bibliography are provided. (KW)

ABSTRACT 33072

EC 03 3072 ED N.A.
 Publ. Date 71 110p.
 Annand, Douglass R.
The Wheelchair Traveler.
 EDRS not available
 Wheelchair Traveler, Ball Hill Road, Milford, New Hampshire 03055 (\$3.00).

Descriptors: exceptional child services; handicapped children; handicapped; directories; facilities; evaluation; public facilities

Presented is a listing by state (none from Alaska), including Canada, Mexico, and Puerto Rico, of hotels, motels, restaurants, and sight-seeing attractions usable by the handicapped traveler, especially the wheelchair traveler. Each listing includes names of facility and general area, facility address, and information needed for the traveler's comfort where space permits, such as door size in inches, steps, availability of special wheelchair units, telephone availability, nearby restaurants, usable restrooms, transportation service, television in rooms, swimming pools, and air conditioning. Room and meal prices are not included. A general rating system tells the usability of each entry, although no listing is guaranteed. (CB)

ABSTRACT 33092

EC 03 3092 ED N.A.
 Publ. Date 71 4p.
 Brett, James J.
Pathways for the Blind.
 EDRS not available
 Conservationist; P13-6 Jun-Jul 1971

Descriptors: exceptional child services; visually handicapped; recreational facilities; braille; ecology; outdoor education; Pennsylvania

Pennsylvania's Oerwood braille trail is described briefly. The trail is self guiding by means of a main trail cord, and covers one-half mile of woodland, mixed bottomland-meadow, across streams and over hills. Seventeen braille markers mounted on posts greet the hiker. The article includes selections from several markers, all of which emphasize ecology. Each marker also has several questions designed to stimulate the hiker's

thoughts about man's relationship to nature. (CB)

ABSTRACT 33158

EC 03 3158 ED N.A.
Publ. Date Aug 71 4p.
Kreger, Kenneth C.
**Compensatory Environment Program-
ing for the Severely Retarded Behav-
iorally Disturbed.**
EDRS not available
Mental Retardation; V9 N4 P29-32 Aug
1971

Descriptors: mentally handicapped; be-
havior problems; institutional environ-
ment; behavior change; milieu therapy;
environmental influences; program de-
scriptions

A Compensatory Environment Program was developed to provide a minimally stressful living environment and training services for severely and profoundly retarded adult residents who exhibited severe behavioral problems. This program emphasized reduction of environmental stress by altering utilization of living space to reduce congestion and by increasing the availability of varieties of sensory stimulation. Results indicated that manipulation of environmental living conditions is demonstrably one of the most effective approaches to changing the behavior of this group of severely disturbed residents. (Author)

ABSTRACT 33178

EC 03 3178 ED 054 558
Publ. Date 71 172p.
Coleman, Thomas W., Jr.; Hyman, Mil-
ton
**A Preliminary Study/Survey for Dem-
onstration Community Housing Pro-
grams for the Adult Mentally Retard-
ed, Physically Handicapped and Men-
tally Ill.**
Wayne State University, Detroit, Depart-
ment of Special Education and Vocational
Rehabilitation
Michigan State Department of Social
Services, Lansing
EDRS mf, hc

Descriptors: handicapped; housing; hous-
ing needs; residential programs; public
housing; building design; public facilities;
literature reviews; adults; surveys; legis-
lation; Michigan

A study was conducted for the Michigan State Housing Development Authority to gather background data necessary to initiate prototype community housing for mentally and physically handicapped independent adults. In an extensive survey and analysis of the literature and existing facilities, the problem of mental retardation, including legislation supporting construction of residences for the retarded, attitudes toward residential care, and types of residential facilities, was covered first. Second, the problem of the physically handicapped was reviewed, including architectural and transportation barriers, residential and supporting service needs, and a brief description of some housing programs. Status of residential programs for the

mentally ill was also studied. Need for community housing was defined and documented, criteria describing the target population identified, pertinent socio-economic and geographic factors analyzed, similar programs and facilities identified and evaluated, and fundamentals involved in designing a housing project and services described. It was concluded that support for such programs exists among parents, the handicapped, and citizens, but that existing programs are often isolated and inadequate. Twenty-four recommendations concerning public housing for the adult handicapped are made. (KW)

ABSTRACT 33196

EC 03 3196 ED 054 563
Publ. Date Oct 70 139p.
**Hawaii State Plan--Facilities for the
Mentally Retarded.**

Hawaii State Department of Health,
Honolulu, Hospital and Medical Facili-
ties Branch
EDRS mf, hc

Descriptors: exceptional child services;
mentally handicapped; state programs;
facilities; state surveys; educational facili-
ties; program planning; Hawaii

Prepared annually, the Hawaii State Plan is a public document for guiding the development of services and facilities for the mentally retarded. Using quantitative and narrative information it describes present services, presents a program for development of facilities to meet needs, and serves as the basis for allocation of funds under P.L. 88-164. Chapter 1 covers purpose, authority, organization of Health Department, the State Advisory Council, and goals of the plan. Demographic, geographic, and political characteristics of Hawaii are summarized in Chapter 2. Discussed next are public interest in mental retardation, the planning concept, factors influencing planning, characteristics of the retarded, scope of the problem, range of services, and relationship to other planning efforts. Chapter 4 states planning considerations unique to Hawaii, delineates planning areas, and examines percentage of retarded and special education classes and generic services provided. Chapter 5 contains an inventory and analysis of existing facilities and services and a review of programmed facilities and priorities. Information on methods of administration, revised laws of Hawaii, and several special projects is appended. (KW)

ABSTRACT 40020

EC 04 0020 ED N.A.
Publ. Date May 71 6p.
Lehmann, Phyllis E.
Teacher Training Takes to the Road.
EDRS not available
Manpower; P1-6 May 1971

Descriptors: computer assisted instruc-
tion; computers; teaching methods;
teaching machines; programmed instruc-
tion; mobile classrooms; inservice teach-
er education; Pennsylvania

Pennsylvania State University's mobile

van equipped for computer assisted instruction (CAI) is discussed. The mobile classroom consists of a central IBM computer instructional system with 15 student terminals. Multi-media programmed courses take an average of 30 hours to complete. The individualized teaching method is said to benefit middle-aged teachers especially, who may not feel comfortable in regular classroom settings as students. The mobile classroom is also shown to be helpful throughout Appalachia's isolated areas that need quality inservice teacher education. A small staff runs the teaching machine with an annual operational cost of \$250,000. A CAI special education course is described as helping teachers spot handicapping problems by teaching them specific behavioral clues. (CB)

ABSTRACT 40063

EC 04 0063 ED N.A.
Publ. Date Jun 71 8p.
Craig, J. A. L.

**Strathmont Center--Adelaide, South
Australia: A Training Establishment
for the Intellectually Retarded.**

EDRS not available
Australian Journal of Mental Retarda-
tion; V1 N6 P173-80 Jun 1971

Descriptors: exceptional child services;
mentally handicapped; institutions; archi-
tectural programing; design needs; insti-
tutional environment; facilities; foreign
countries; Australia

Principles involved in designing residen-
tial facilities for the mentally retarded
are discussed, with emphasis upon the
need of the individual to live and devel-
op within the context of the human fami-
ly or in a family-like situation in which
each small group of residents engages in
all the normal activities of eating, sleep-
ing, and daily living as a family unit.
Strathmont Centre in Adelaide, South
Australia, is presented as an example of
a residential training institution for the
retarded which has incorporated this
normality principle into its design. The
Centre, designed around the family
group principle, contains 17 villas of four
eight-person home units each. The layout
of the village is described and illustrated
by a site plan, and architectural or interi-
or design features of the following are
described: administration building, recre-
ation hall, swimming pool and gymna-
sium, chapel, library, villas, school build-
ings, occupational and physiotherapy
buildings, workshop, stores, sanitation
center and garage, and other special fea-
tures. (KW)

ABSTRACT 40142

EC 04 0142 ED 055 378
Publ. Date 71 79p.
Bayes, Kenneth, Ed.; Francklin, Sandra,
Ed.

Designing for the Handicapped.

EDRS not available
Society for Emotionally Disturbed Child-
ren, 1405 Bishop Street, Room 303,
Montreal 107, Quebec, Canada (\$4.00).

Descriptors: handicapped children; archi-
tectural programing; building design; en-

vironmental influences; educational facilities; environmental research; gifted; handicapped; school buildings; classroom environment

The eleven articles in the volume concern methods and techniques for designing specialized schools, institutions, and other buildings or accommodations for the handicapped and particularly for exceptional children (both handicapped and gifted). Written by architects and others in this field, the articles discuss incorporation of both psychological and physical needs of the special populations into architectural design. In addition to discussions of the needs of the handicapped, design approach to an individual building, the possible therapeutic aspects of environment, and environment for assessment, architectural design is also examined in relation to the following particular exceptionalities: educable mentally retarded, mentally ill, maladjusted children, visually handicapped, aurally handicapped, learning disabled, and gifted. Appended are a list of research projects involving environmental design factors and the handicapped with brief descriptions of each project, and a bibliography of material written specifically for architects and planners or relevant to the design of the environment as it particularly relates to the handicapped. (KW)

ABSTRACT 40249

EC 04 0249 ED 055 404
Publ. Date 71 124p.
Abeson, Alan; Blacklow, Julie
Environmental Design: New Relevance for Special Education.
Council for Exceptional Children, Arlington, Virginia
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.
EDRS mf, hc
Council for Exceptional Children, Suite 900, 1411 South Jefferson Davis Highway, Arlington, Virginia 22202 (\$6.75).

Descriptors: exceptional child research; handicapped children; environmental research; educational facilities; architectural programming; design needs; school buildings; research reviews (publications); national surveys; classroom environment; educational planning; building design

Educational facilities for handicapped children are examined in terms of environmental design planning and needs. The first of four sections reports basic findings of the project Physical Environment and Special Education: An Interdisciplinary Approach to Research, which appraised by questionnaires and site visits the present status of special education facilities in the United States. Presented are general findings and implications for design planning based on data gathered relating to student integration, community and parent involvement, the learning space, the educational program and activities, social adjustment, observation systems, transportation, and administrative planning. The second section focuses on planning mechanisms and strategies from the point of view of both ar-

chitects and special educators. Some individual approaches to planning are presented and mechanics of involving people in the planning process are discussed. The third section contains some specific solutions to environmental problems, with accompanying illustrative drawings. The final section presents selected research findings related to physical and psychological effects of environmental manipulation, research needs, and methodologies which can be used to conduct further research in this area. (KW)

ABSTRACT 40368

EC 04 0368 ED 056 423
Publ. Date Feb 70 309p.
Abeson, Alan; Berenson, Bertram
Physical Environment and Special Education: An Interdisciplinary Approach to Research. Final Report.
Council for Exceptional Children, Arlington, Virginia
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.
EDRS mf, hc
OEG-2-7-070566-3026
BR-7-0566

Descriptors: exceptional child research; handicapped children; educational facilities; design needs; physical environment; school buildings; architecture; environmental influences; teacher attitudes; financial support; government role; guidelines; research methodology; information dissemination

The project on physical environment and special education attempted to formulate research based statements that would assist both special educators and architects in designing educational facilities for special education. The major implication of all findings was that a dearth existed in educators and facility planners who were trained and/or experienced in planning and designing special educational facilities. Data on teacher attitudes were said to include: minor modifications in teacher's working area could improve both environment and educational program; and teachers were excluded from planning school facilities in which they worked. Three areas for research efforts were then suggested: evaluation of facility planning, measurement of effective use of environment, and assessment of relationship between man and physical environment. It was then suggested that funding of improved special educational facilities might come from the government, both state and federal. The bulk of the report was appendixes concerning appraisal and report on existing special education facilities in the U.S.; information useful to facility planners and a special planning process guide; methodology for field experimentation for measuring environmental role in educational process; and dissemination of information. (CB)

ABSTRACT 40406

EC 04 0406 ED N.A.
Publ. Date Nov 71 6p.
Clemens, Donald W.

Functional Design in Building a Residential Treatment Facility.

EDRS not available
Child Welfare; V50 N9 P513-8 Nov 1971

Descriptors: exceptional child education; emotionally disturbed; behavior problems; residential programs; child welfare; architectural programming; design needs; physical environment

The paper describes designs for a residential community for children with behavior problems that is said to reflect the physical environment in residential treatment and enhance the therapeutic program. Basic to the overall planning process are the following stated assumptions: function will determine structure; buildings will express the innovative role expected of voluntary private agencies; and the center will accept the possibility that innovative solutions of building needs will result in experimental structures that may exceed customary construction costs. The final design includes kitchen-dining areas, mud-room entry, and playroom. The design is said to emphasize the need for privacy and is included in the article. (CB)

ABSTRACT 40411

EC 04 0411 ED N.A.
Publ. Date Jun 71 12p.
The Physical Environment of the Mentally Handicapped: II--From Ward to Living Unit.
EDRS not available
British Journal of Mental Subnormality; V17 N32 P54-65 Jun 1971

Descriptors: exceptional child services; mentally handicapped; residential care; hospitals; institutionalized (persons); design needs; physical environment

Described is the redesigning of a hospital ward for mentally handicapped persons into a series of small, home living units, and its effect on the residents. The redesigning is said to be based on the philosophy that the mentally subnormal person needs to be taught and trained to live a simple life as normal as possible by maximizing his potential. The article emphasizes that a typical old-fashioned ward is converted into a series of home living units at a reasonable cost and that the conversion is completed in 8 months from briefing to the moving in of the patients. The project is explained to result from an interdisciplinary approach. The residents are shown to benefit from the new living conditions by their eagerness and motivation to participate in the daily routine affairs of living. (CB)

ABSTRACT 40533

EC 04 0533 ED N.A.
Publ. Date 71 6p.
Dailey, Rebecca F.
Media in the Round: Learning in the Special Experience Room.
EDRS not available
Teaching Exceptional Children; V4 N1 P4-9 Fall 1971

Descriptors: exceptional child education; handicapped children; gifted; instruction-

al media; educational technology; elementary school students; educational facilities; mass media; Pennsylvania

Described are educational facilities, development, objectives, and educational programs of the Special Experience Room of the Everett A. McDonald Comprehensive Elementary School in Warminster, Pennsylvania. The circular instructional media room is 40 feet in diameter with a hemispheric dome, carpeting, and no furniture. The room also has a projection area consisting of the entire wall above a couple feet from the floor, climate control, odor ducts, and sound equipment. Overall objective of the room and its educational technology is to increase a child's perception by involving him in vision and sound experiences. Learning by inquiry and discovery is applicable to the school's students who are physically handicapped, mentally retarded, learning disabled, academically gifted, and normal in abilities. Children are said to design some of their own programs. The school presently has over 200 educational programs including such subjects as developing perceptual motor coordination, cultural studies, visual imagery, and symbology. Selected teacher reactions to the Special Experience Room reveal that students are highly motivated to learn in its environment. (CB)

ABSTRACT 40799

EC 04 0799 ED N.A.
Publ. Date Apr 71 60p.
Walter, Felix

Four Architectural Movement Studies for the Wheelchair and Ambulant Disabled.

Disabled Living Foundation, London, England

EDRS not available

Disabled Living Foundation, 346 Kensington High Street, London W14, England.

Descriptors: physically handicapped; architectural programing; architectural barriers; building design; wheel chairs; motor vehicles

Reported upon are four architectural movement studies in which the subjects were wheelchair-users and ambulant disabled persons. Purpose of the first two studies, dealing with circulation space (around and between obstacles) and doorway maneuvers, was to establish planning recommendations which would embrace all horizontal space movement activities involved in the general design of buildings. Numerous architectural specifications are included based on measurements made during the studies. Reported are results of the third study, which established criteria for the design of ramp gradients for use by the ambulant disabled and by wheelchair-users, including those who were assistant-propelled. The final study dealt with disabled drivers and their vehicles. Recommendations based on results concern minimum space needs for the vehicles when parking, garaging, and making U turns. (KW)

ABSTRACT 40800

EC 04 0800 ED N.A.
Publ. Date Jun 71 39p.
Walter, Felix

Sports Centres and Swimming Pools.
Disabled Living Foundation, London, England

EDRS not available

Disabled Living Foundation, 346 Kensington High Street, London W14, England.

Descriptors: physically handicapped; building design; recreational facilities; swimming; architectural barriers; wheel chairs

The design of sports centers and swimming pools is studied with particular reference to the needs of the physically handicapped. The first group of recommendations contains guidelines for determining the main areas in a recreation center to which the disabled should have access and guidelines for external provisions (parking, approaches to the center, paving, recreational space). Design recommendations for the center itself cover the main entrance foyer, vertical circulation, general design detail, changing rooms, and the gymnasium. The largest group of recommendations concerns design features of swimming pools which enable their use by the physically handicapped. Discussed are the spectator area, changing rooms, clothes storage, sanitary facilities, pre-cleansing, quick drying rooms, the sauna, pool design and use, and equipment and aids. (KW)

ABSTRACT 40852

EC 04 0852 ED N.A.
Publ. Date Dec 71 19p.
Drew, Clifford J.

Research on the Psychological-Behavioral Effects of the Physical Environment.

EDRS not available

Review of Educational Research; V41 N5 P447-65 Dec 1971

Descriptors: research reviews (publications); environmental research; environmental influences; physical environment; behavior patterns; psychological characteristics

Research was reviewed pertaining to the psychological and behavioral effects of the physical environment on people. Examination of behavioral patterns of environmental manipulation covered studies of exploratory locomotion, color stimulation, movement patterns in art galleries, experimental control of infant locomotion, effects of stimulus variation and subject familiarity with environment on the amount of locomotion, group interaction in a psychiatric treatment ward context, effects of room size and acoustic qualities on verbal behavior, and furniture arrangement as an influential variable. Research on the psychological effects and characteristics of environmental manipulation included experimental findings on the nonlocomotive activities of overactive and control retardates, preferences for environmental factors of complexity and symmetry using geometric

shapes, high school student reactions to being taught in classrooms with and without windows, visual aesthetics of a psychiatric environment, examiner performance as a function of prolonged testing in beautiful and ugly rooms, rating of facial photographs, behavioral influence of spatial arrangements, manipulation of thermal environment, and investigation of crowding and thermal stress. Methodological difficulties facing the physical environment researcher were then noted briefly, followed by discussion of some implications of the research findings. (CB)

ABSTRACT 40894

EC 04 0894 ED 058 678
Publ. Date 71 109p.

Waligura, Randolph L. and Others
Environmental Criteria: MR Preschool Day Care Facilities.
Texas A and M University, College Station, School of Architecture
Rehabilitation Services Administration (DHEW), Washington, D. C.
EDRS mf.hc

Descriptors: exceptional child services; mentally handicapped; child care centers; classroom environment; environmental influences; disadvantaged youth; environmental research; preschool children; building design; facilities

Contributions of the physical environment to the learning process and environmental needs of preschool children are evaluated. Guidelines for the planning and design of preschool day care facilities, especially for mentally retarded and other children with developmental disabilities, are established. The current status and trends in day care services are summarized and the background, learning characteristics, and curriculum objectives for retarded, culturally deprived, and normal children are described. Methods and activities used to achieve these objectives, and the implications they have for the supporting physical environment, are identified. Component parts of the physical environment (color, light, acoustics, climate control, interior surfaces, space, flexibility) are discussed individually and in their relationship with each other and various psychological variables. Suggested detailed planning and design requirements for the preschool facility cover the education/training area, ancillary area, administrative area, storage, furniture, and safety. The planning and design process necessary for utilization of these guidelines is illustrated by four hypothetical case studies in which facilities are designed for different day care situations. (KW)

ABSTRACT 40947

EC 04 0947 ED N.A.
Publ. Date Feb 72 5p.

Trachtman, Joseph N.
The Visual Environment of the Classroom and Learning.

EDRS not available

Optometric Weekly; V63 N5 P106-10 Feb 1972

Descriptors: exceptional child research;

research reviews (publications); visually handicapped; visual acuity; visual perception; academic achievement; environmental influences

Excerpts from selected research studies were cited to show that a proper visual classroom environment was necessary for optimum learning to occur. One study found that the incidence of visual problems was greater with increased age. Another study attributed poor posture and visual defects to a poor visual environment. Another study reported significant correlations among visual skills and academic achievement. The need for visual screening tests to include a measure of hyperopia was noted, based on research findings that hyperopia and poor binocularity have been related to poor academic achievement. (CB)

ABSTRACT 41247

EC 04 1247 ED N.A.
Publ. Date Feb 72 7p.
Gorton, Chester E.

The Effects of Various Classroom Environments on Performance of a Mental Task by Mentally Retarded and Normal Children.

EDRS not available

Education and Training of the Mentally Retarded; V7 N1 P32-8 Feb 1972

Descriptors: exceptional child research; mentally handicapped; minimally brain injured; classroom environment; attention span; environmental influences; academic achievement; performance factors

The study was undertaken to determine if performance of a mental task by brain injured mentally retarded children, cultural familial mentally retarded children, and normal children of comparable mental age would be differentially affected by various classroom environmental conditions. It was found that both normal children and cultural familial mentally retarded children performed the experimental task best when secluded visually. There was no particular advantage to complete seclusion. The brain injured mentally retarded children, however, performed best when completely secluded. Since there was no significant difference in overall performance between the brain injured and cultural familial mentally retarded children, the important factor seems to be the type of environmental control. (Author)

ABSTRACT 41013

EC 04 1013 ED 058 688
Publ. Date 71 25p.
Special Education Facilities: Schools

and Playgrounds for Trainable Mentally Handicapped Children.

Ontario Department of Education, Toronto. School Planning and Building Research Section
EDRS mf

Descriptors: exceptional child education; trainable mentally handicapped; building design; classroom arrangement; playgrounds; mentally handicapped; school buildings; architectural programing; educational facilities

Intended to assist school boards in planning educational facilities for trainable mentally retarded children, the booklet contains designs illustrating both the general structure and specific room arrangements for various sizes of school and various age groups. The designs show small, self-contained schools where mobility in the grouping of classes and flexibility in the arrangement of training facilities can be achieved easily. In addition to building layout and classroom arrangement, suggestions are made concerning bathrooms, playroom, kitchen, craft room, principal's office, and staff and health room. Discussion of the playground area covers both the planning of outdoor areas and specific types of recommended playground equipment. (KW)

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